**http://www.johnstonsarchive.net/nuclear/tests/index.html**

**Database of nuclear tests, USSR/Russia：1949-1990**

ID# SERIES SHOT YEAR MON DAY TIME SITE LAT LONG NT HOLE HOB GZALT NT TYPE PUR YD-MN YD-MX YD-EST NT YIELD MAG CRAT VENT DEVIC WARHEAD R N SOURCES

GMT GMT DEG DEG M M KT KT KT KT M

1 1949 1 Pervaya Molniya (Joe 1)1949 AUG 29 00:00 STS-GZ 50.44000 77.82000 \*C 30 AS-T WR 22 20 22 IP RDS-1 KB-11 A 1,3,4,5,9,r,s,t

2 1950 X 1950 STS 50.00000 78.00000 AS-T 0 0 ND RDS-1 KB-11 X 4,9,r

3 1951 2 Vtoraya Molniya (Joe 2)1951 SEP 24 06:19 STS 50.00000 78.00000 C 30 AS-T WR 38 38.3 38.3 IP RDS-2 KB-11 A 1,3,4,5,9,r

4 1951 3 (Joe 3) 1951 OCT 18 03:53 STS 50.00000 78.00000 C 380 A-AD WR 42 41.2 42 IC RDS-3 KB-11 A \* 1,3,4,5,9,r

5 1953 4 (Joe 4) 1953 AUG 12 STS 50.00000 78.00000 30 AS-T WR 400 250 400 C SL-85 RDS-6s KB-11 A \* 1,3,4,5,9,r

6 1953 5 (Joe 5) 1953 AUG 23 02:00 STS 50.00000 78.00000 C 600 A-AD WR 28 28 IC? RDS-4 KB-11 A 1,3,4,5,9,r

7 1953 6 (Joe 6?) 1953 SEP 3 STS 50.00000 78.00000 255 A WR 5.8 5.8 KB-11 A 1,3,4,5,9,r

8 1953 7 1953 SEP 8 STS 50.00000 78.00000 220 A WR 1.6 1.6 KB-11 1,3,4,9,r

9 1953 8 (Joe 7?) 1953 SEP 10 STS 50.00000 78.00000 220 A WR 4.9 4.9 KB-11 A 1,3,4,5,9,r

10 1954 9 (Joe 8?) 1954 SEP 14 06:33 -RU-O 52.60000 52.84000 C 350 A-AD ME 40 40 IC RDS-3 KB-11 A \* 1,3,4,5,9,r

11 1954 10 1954 SEP 29 STS 50.00000 78.00000 210 A WR 0.2 0.2 KB-11 1,3,4,9,r

12 1954 11 1954 OCT 1 STS 50.00000 78.00000 105 A WR 0.03 0.03 KB-11 1,3,4,9,r

13 1954 12 (Joe 9?) 1954 OCT 3 STS 50.00000 78.00000 130 A WR 2 2 KB-11 A 1,3,4,5,9,r

14 1954 13 (Joe 10?) 1954 OCT 5 03:00 STS 50.00000 78.00000 0 AS WR 4 4 KB-11 A 1,3,4,5,9,r

15 1954 14 (Joe 11?) 1954 OCT 8 STS 50.00000 78.00000 295 A WR 0.8 0.8 KB-11 A 1,3,4,5,9,r

16 1954 15 1954 OCT 19 STS 50.00000 78.00000 15 AS-T WR 0 0.001 0.001 FZ RDS-9/T-5 KB-11 1,3,4,9,r

17 1954 16 (Joe 12?) 1954 OCT 23 STS 50.00000 78.00000 410 A WR 62 62 IC RDS-3I KB-11 A 1,3,4,5,9,r

18 1954 17 (Joe 13?) 1954 OCT 26 STS 50.00000 78.00000 110 A WR 2.8 2.8 KB-11 A 1,3,4,5,9,r

19 1954 18 (Joe 14?) 1954 OCT 30 04:00 STS 50.00000 78.00000 55 AS-AD WR 10 10 KB-11 A 1,3,4,5,9,r

20 1955 X 1955 FEB 20 A-R 0 0 FZ R-5M wh KB-11 P \* 1,3,4,5,9,r

21 1955 19 (Joe 15) 1955 JUL 29 02:00 STS 50.00000 78.00000 2.5 AS WR 1.3 5 1.3 IP RDS-9 KB-11 A 1,3,4,5,9,r

22 1955 20 (Joe 16) 1955 AUG 2 03:00 STS 50.00000 78.00000 2.5 AS WR 12 25 12 IP RDS-9 KB-11 A 1,3,4,5,9,r

23 1955 21 1955 AUG 5 STS 50.00000 78.00000 1.5 AS WR 1.2 1.2 IP RDS-9 KB-11 1,3,4,9,r

24 1955 22 (Joe 17) 1955 SEP 21 NZ-CB 70.70000 54.56000 -10 -90 MX UW-B WE 3.5 20 3.5 IP RDS-9/T-5 KB-11 A 2,3,4,5,g

25 1955 X 1955 SEP 21 STS 50.00000 78.00000 AS 0.001 MX 0 P 1,3,4,5,9,r

26 1955 23 (Joe 18) 1955 NOV 6 04:50 STS 50.00000 78.00000 1000 A WR 250 215 250 SL RDS-27 KB-11 A 1,3,4,5,9,r

27 1955 24 (Joe 19) 1955 NOV 22 STS 50.00000 78.00000 1550 A-AD WR 1600 1600 1600 TN RDS-37 KB-11 A \* 1,3,4,5,9,r

28 1956 25 1956 FEB 2 MTR 46.00000 62.00000 AS-R WE 0.3 0.3 \* 2,3,4

29 1956 26 1956 MAR 16 05:00 STS 50.00000 78.00000 0.4 AS WR 14 14 A 1,3,4,5,9,r

30 1956 27 1956 MAR 25 STS 50.00000 78.00000 1 AS WR 5.5 5.5 A 1,3,4,5,9,r

31 1956 28 1956 AUG 24 00:15 STS 50.00000 78.00000 93 AS-T WR 27 27 A 1,3,4,5,9,r

32 1956 29 1956 AUG 30 STS 50.00000 78.00000 1100 A WR 900 900 TN A 1,3,4,5,9,r

33 1956 30 1956 SEP 2 STS 50.00000 78.00000 1050 A WR 51 51 A 1,3,4,5,9,r

34 1956 31 1956 SEP 10 STS 50.00000 78.00000 270 A WR 38 38 S 1,3,4,5,9,r

35 1956 32 1956 NOV 17 STS 50.00000 78.00000 2000 A WR 900 900 TN A 1,3,4,5,9,r

36 1956 33 1956 DEC 14 STS 50.00000 78.00000 1965 A WR 40 40 1,3,4,9,r

37 1957 34 1957 JAN 19 MTR 49.00000 46.00000 10370 A-R WE 10 10 A 2,3,4

38 1957 35 1957 MAR 8 STS 50.00000 78.00000 610 A WR 19 19 A 1,3,4,5,9,r

39 1957 36 1957 APR 3 STS 50.00000 78.00000 1100 A WR 42 42 A 1,3,4,5,9,r

40 1957 37 1957 APR 6 STS 50.00000 78.00000 1145 A WR 57 57 A 1,3,4,5,9,r

41 1957 38 1957 APR 10 STS 50.00000 78.00000 2000 A WR 680 680 TN A 1,3,4,5,9,r

42 1957 39 1957 APR 12 STS 50.00000 78.00000 1145 A WR 22 22 A 1,3,4,5,9,r

43 1957 40 1957 APR 16 STS 50.00000 78.00000 2000 A WR 320 320 TN A 1,3,4,5,9,r

44 1957 41 1957 AUG 22 06:30 STS 50.00000 78.00000 1880 A WR 520 520 TN A 1,3,4,5,9,r

45 1957 42 1957 AUG 26 STS 50.00000 78.00000 410 A SE 0.1 0.1 1,3,4,9,r

46 1957 43 1957 SEP 7 08:00:01.0 NZ-CB 70.69000 54.80000 15 AS-T FS 32 32 A 2,3,4

47 1957 44 1957 SEP 13 STS 50.00000 78.00000 780 A WR 5.9 5.9 1,3,4,9,r

48 1957 45 1957 SEP 24 09:00 NZ-MB 73.00000 55.00000 C 2000 A-AD WR 1600 1600 TN A 2,3,4

49 1957 46 1957 SEP 26 05:00 STS 50.00000 78.00000 2000 A WR 13 13 A 1,3,4,5,9,r

50 1957 47 1957 OCT 6 09:00 NZ-MB 73.00000 55.00000 C 2120 A WR 2900 2900 TN RDS-46A/R-7A wh A \* 2,3,4,c

51 1957 48 1957 OCT 10 06:54:32 NZ-CB 70.70000 54.56000 C -30 -60 MX UW-AS WE 10 6 6 RDS-9/T-5 KB-11 A \* 2,3,4,b,m

52 1957 49 1957 DEC 28 STS 50.00000 78.00000 615 A WR 12 12 A 1,3,4,5,9,r

53 1958 50 1958 JAN 4 STS 50.00000 78.00000 400 A WR 1.3 1.3 1,3,4,9,r

54 1958 51 1958 JAN 17 STS 50.00000 78.00000 500 A WR 0.5 0.5 1,3,4,9,r

55 1958 52 1958 FEB 23 NZ 73.00000 55.00000 2500 A WR 860 860 TN wh-2 NGB? KB-11?A 2,3,4

56 1958 53 1958 FEB 27 07:59 NZ 73.00000 55.00000 2500 A WR 250 250 TN A 2,3,4

57 1958 54 1958 FEB 27 10:24 NZ 73.00000 55.00000 A WR 1500 1500 TN wh-1 Ch-70?A 2,3,4

58 1958 55 1958 MAR 13 STS 50.00000 78.00000 475 A WR 1.2 1.2 1,3,4,9,r

59 1958 X 1958 MAR 13 STS 50.00000 78.00000 A 0.001 MX 0 P 1,3,4,5,9,r

60 1958 56 1958 MAR 14 STS 50.00000 78.00000 1030 A WR 35 35 A 1,3,4,5,9,r

61 1958 57 1958 MAR 14 NZ 73.00000 55.00000 A FS 40 40 A 2,3

62 1958 58 1958 MAR 15 STS 50.00000 78.00000 965 A WR 14 14 A 1,3,4,5,9,r

63 1958 X 1958 MAR 15 STS 50.00000 78.00000 A 0.001 MX 0 P 1,3,4,5,9,r

64 1958 59 1958 MAR 18 STS 50.00000 78.00000 290 A FS 0.16 0.16 1,3,4,9,r

65 1958 60 1958 MAR 20 STS 50.00000 78.00000 1015 A WR 12 12 A 1,3,4,5,9,r

66 1958 61 1958 MAR 21 NZ 73.00000 55.00000 2500 A WR 650 650 TN A 2,3,4

67 1958 62 1958 MAR 22 STS 50.00000 78.00000 1415 A WR 18 18 A 1,3,4,5,9,r

68 1958 63 1958 SEP 30 07:50 NZ 73.00000 55.00000 C 1500 A WR 1200 1200 TN A 2,3,4

69 1958 64 1958 SEP 30 09:55 NZ 73.00000 55.00000 C 2500 A WR 900 900 TN A 2,3,4

70 1958 65 1958 OCT 2 08:00 NZ 73.00000 55.00000 C 1400 A WR 290 290 TN A 2,3,4

71 1958 66 1958 OCT 2 09:01 NZ 73.00000 55.00000 C A FS 40 40 A 2,3,4

72 1958 67 1958 OCT 4 NZ 73.00000 55.00000 800 A WR 9 9 2,3

73 1958 68 1958 OCT 5 06:00 NZ 73.00000 55.00000 C 1200 A WR 15 15 A 2,3,4

74 1958 69 1958 OCT 6 NZ 73.00000 55.00000 1200 A WR 5.5 5.5 2,3

75 1958 70 1958 OCT 10 07:51 NZ 73.00000 55.00000 C A WR 68 68 TN A 2,3,4

76 1958 71 1958 OCT 12 07:53:34 NZ-MB 74.93000 53.32000 A WR 1450 1450 TN wh-1 Ch-70?A 2,3,4,ad

77 1958 72 1958 OCT 15 07:51:14 NZ-MB 74.00000 51.80000 2150 A WR 1500 1500 TN A 2,3,4,ad

78 1958 73 1958 OCT 18 09:51:06 NZ-MB 73.97000 52.47000 A WR 2900 2900 TN A 2,3,4,ad

79 1958 74 1958 OCT 19 07:27 NZ 73.00000 55.00000 C A FS 40 40 A 2,3

80 1958 75 1958 OCT 19 NZ 73.00000 55.00000 900 A WR 0 0.001 0.001 2,3

81 1958 76 1958 OCT 20 08:20 NZ 73.00000 55.00000 C A WR 440 440 TN A 2,3,4

82 1958 77 1958 OCT 21 NZ 73.00000 55.00000 270 A WR 2 2 2,3

83 1958 78 1958 OCT 22 08:21:04 NZ-MB 73.53000 53.10000 2070 A WR 2800 2800 TN A 2,3,4,ad

84 1958 79 1958 OCT 24 08:03:06 NZ-MB 73.68000 54.97000 1525 A WR 1000 1000 TN wh-2 NGB? KB-11?A 2,3,4,ad

85 1958 80 1958 OCT 25 08:20 NZ 73.00000 55.00000 C 1500 A WR 190 190 TN A 2,3,4

86 1958 81 1958 OCT 25 NZ 73.00000 55.00000 300 A FS 0 0.1 0.05 2,3

87 1958 82 1958 NOV 1 MTR 49.00000 46.00000 12000 A-R WE 10 10 A 2,3,4

88 1958 83 1958 NOV 3 MTR 49.00000 46.00000 12000 A-R WE 10 10 A 2,3,4

89 1961 84 1961 SEP 1 STS 50.00000 78.00000 660 A WR 16 150 16 A 1,3,4,5,9,r

90 1961 85 1961 SEP 4 05:00:27 STS-GZ 50.45000 77.74000 C 725 A WR 9 8 9 A 1,3,4,5,9,r

91 1961 86 1961 SEP 5 06:00:05 STS-GZ 50.45000 77.74000 C 500 A WR 16 14 16 A 1,3,4,5,9,r

92 1961 87 1961 SEP 6 STS 50.00000 78.00000 685 A WR 1.1 1.1 1,3,4,9,r

93 1961 88 1961 SEP 6 MTR 48.45000 44.30000 22700 A WE 11 10.5 10.5 A 2,3,j

94 1961 89 1961 SEP 9 STS 50.00000 78.00000 0 AS SE 0.38 0.38 1,3,4,9,r

95 1961 90 1961 SEP 10 09:00:09.2 NZ-MB 74.20000 52.50000 J 2000 A-AD WR 2700 2400 2700 4.60 TN A 2,3,4,j,aa

96 1961 91 1961 SEP 10 11:00 NZ-CB 70.70000 54.60000 \*C 390 A-R WR 12 12 A \* 2,3,4,o

97 1961 92 1961 SEP 10 STS 50.00000 78.00000 180 A WR 0.88 0.88 1,3,4,9,r

98 1961 93 1961 SEP 11 STS 50.00000 78.00000 A WR 0.3 0.3 1,3,4,9,r

99 1961 94 1961 SEP 12 10:08:15.3 NZ-MB? 74.20000 52.10000 ? 1190 A-R WR 1150 3000 E 1150 4.30 TN A \* 2,3,4,aa,ac

100 1961 95 1961 SEP 13 NZ-CB? 70.87000 53.33000 250 0 A WR 6 6 A 2,3,4

101 1961 96 1961 SEP 13 05:01:55.8 STS-GZ 50.45000 77.75000 ? 710 A WR 0.001 20 10 A 1,3,4,5,9,r

102 1961 97 1961 SEP 14 05:59:59.4 STS-GZ 50.35000 77.82000 ? 0.5 AS WR 0.4 0.4 1,3,4,9,r

103 1961 98 1961 SEP 14 09:56:16.7 NZ-MB 74.60000 51.10000 1700 A-R WR 1200 3000 E 1200 TN A \* 2,3,4,ac

104 1961 99 1961 SEP 16 09:08:13.7 NZ-MB 74.00000 51.90000 A-R WR 830 1000 830 TN A \* 2,3,4,ac

105 1961 100 1961 SEP 17 07:00:46.6 STS-GZ 50.45000 77.75000 ? 695 A WR 20 150 21 21 A 1,3,4,5,9,r

106 1961 101 1961 SEP 18 07:59:36.8 NZ-MB? 74.00000 52.00000 1500 A WR 1000 1000 1000 TN A 2,3,ac

107 1961 102 1961 SEP 18 STS 50.00000 78.00000 1 AS SE 0.004 0.004 1,3,4,9,r

108 1961 103 1961 SEP 18 STS 50.00000 78.00000 A WR 0.75 0.75 1,3,4,9,r

109 1961 104 1961 SEP 19 STS 50.00000 78.00000 0 AS SE 0.03 0.03 1,3,4,9,r

110 1961 105 1961 SEP 20 STS 50.00000 78.00000 280 A WR 4.8 4.8 1,3,4,9,r

111 1961 106 1961 SEP 20 08:12:12 NZ-MB? 73.52000 54.30000 ? 1600 A WR 150 1500 2000 1500 TN A 2,3,4,q

112 1961 107 1961 SEP 21 14:01:01.6 STS-GZ 50.33000 77.70000 ? 110 A WR 0.8 0.8 1,3,4,9,r

113 1961 108 1961 SEP 22 08:11:00 NZ-MB? 73.52000 54.30000 ? 1300 A WR 260 1000 260 A 2,3,4,q,ac

114 1961 109 1961 SEP 26 07:01:19.8 STS-GZ 50.45000 77.75000 ? 665 A WR 1.2 1.2 1,3,4,9,r

115 1961 110 1961 OCT 1 STS 50.00000 78.00000 700 A WR 3 3 1,3,4,9,r

116 1961 111 1961 OCT 2 10:30:50 NZ-MB? 73.92000 54.55000 C 1500 A WR 250 290 250 A 2,3,4,j

117 1961 112 1961 OCT 4 07:01:19.9 STS-GZ 50.44000 77.76000 ? 605 A WR 13 13 1,3,4,9,r

118 1961 113 1961 OCT 4 07:30:54.8 NZ-MB 73.70000 53.80000 2100 A WR 1500 10000 3000 3000 4.50 TN A 2,3,4,q,aa

119 1961 114 1961 OCT 6 07:00:12.2 NZ-MB 74.30000 51.60000 2700 A WR 4000 3000 E 4000 4.70 TN A 2,3,4,aa,ac

120 1961 115 1961 OCT 6 MTR 48.45000 44.30000 ? 41300 AH-R WE 40 40 2,3,4,q

121 1961 116 1961 OCT 8 NZ-CB 70.70000 54.60000 \* 1450 A-CM WR 15 15 KSR-2 wh? A \* 2,3,4

122 1961 117 1961 OCT 11 07:39:59.9 STS-D 49.77389 77.98861 A V-1 724 A UG-T FS 1 2 1 4.78 A 1,3,4,5,6,9,r

123 1961 118 1961 OCT 12 05:31:03.6 STS-GZ 50.45000 77.75000 ? 670 A WR 15 15 A 1,3,4,5,9,r

124 1961 119 1961 OCT 17 07:00:00.8 STS-GZ 50.45000 77.75000 ? 505 A WR 6.6 6.6 1,3,4,9,r

125 1961 120 1961 OCT 19 05:30:42.6 STS-GZ 50.45000 77.75000 ? 710 A WR 0.001 20 10 10 1,3,4,9,r

126 1961 121 Raduga 1961 OCT 20 08:07:02.0 NZ-MB 73.80000 53.20000 A-R WR 1450 3000 1450 TN R-13 wh? A \* 2,3,4,ac

127 1961 122 Korall 1961 OCT 23 08:31:22.1 NZ-CB 70.70000 54.56000 -20 -47 UW-AS WE 4.8 4.8 5.10 RDS-9 KB-11 A \* 2,3,4,b,m,aa

128 1961 123 1961 OCT 23 10:30:48.0 NZ-MB 73.90000 53.80000 3500 A-AD WR 12500 25000 12500 TN A 2,3,4,5,ac

129 1961 124 1961 OCT 25 08:31:05 NZ-MB? 73.52000 54.30000 ? 1450 A WR 300 <1000 300 A 2,3,q,ac

130 1961 125 1961 OCT 25 STS 50.00000 78.00000 A FS 0.5 0.5 1,3,4,9,r

131 1961 126 Korall 1961 OCT 27 08:30:26.6 NZ-CB 70.70000 54.67000 1.1 -59 AW-AS WE 16 16 RDS-9 KB-11 A \* 2,3,4,b,m

132 K Project 127 K2 1961 OCT 27 MTR 49.00000 46.00000 ? 150000 AX-R WE 1.2 1.2 \* 2,3,4,c

133 K Project 128 K1 1961 OCT 27 MTR 49.00000 46.00000 ? 300000 AX-R WE 1.2 1.2 \* 2,3,4,c

134 1961 129 1961 OCT 30 STS 50.00000 78.00000 470 A WR 0.09 0.09 1,3,4,9,r

135 1961 130 Tsar Bomba 1961 OCT 30 08:33:27.8 NZ-MB 73.80000 53.50000 3500 A-AD WR 50000 58000 58000 5.40 TN-03 RDS-220 KB-11 S \* 2,3,4,9,c,j,n,a

136 1961 131 1961 OCT 31 08:29:17.2 NZ-MB 73.60000 56.20000 2200 A WR 5000 3000 5000 TN A 2,3,4,ac

137 1961 132 1961 OCT 31 08:38 NZ-MB 73.00000 55.00000 C 1530 A WR 150 1500<1000 400 A 2,3,4,5,ac

138 1961 133 1961 NOV 1 STS 50.00000 78.00000 475 A WR 2.7 2.7 1,3,4,9,r

139 1961 134 1961 NOV 2 08:41 NZ-MB 73.00000 55.00000 1400 A WR 120 120 A 2,3,4,5

140 1961 135 1961 NOV 2 NZ-MB 73.00000 55.00000 1500 A WR 280 280 A 2,3,4

141 1961 136 1961 NOV 2 STS 50.00000 78.00000 645 A WR 0.6 0.6 1,3,4,9,r

142 1961 137 1961 NOV 3 STS 50.00000 78.00000 0 AS SE 0 0.001 0.001 1,3,4,9,r

143 1961 138 1961 NOV 3 STS 50.00000 78.00000 635 A WR 0.9 0.9 1,3,4,9,r

144 1961 139 1961 NOV 4 NZ 73.00000 55.00000 1770 A WR 15 15 2,3

145 1961 140 1961 NOV 4 07:20:19.7 NZ-MB? 73.70000 55.70000 1750 A WR 150 1500 2000 1500 TN? A 2,3,5

146 1961 141 1961 NOV 4 NZ 73.00000 55.00000 2240 A WR 6 6 2,3

147 1961 142 1961 NOV 4 STS 50.00000 78.00000 0 AS WR 0.2 0.2 1,3,4,9,r

148 1962 143 Argon-1 1962 FEB 2 08:00:00.2 STS-D 49.78500 77.99694 A A-1 700 A UG-T WE 0.001 20 15 15 5.63 C A 1,3,4,5,6,9,r

149 1962 144 1962 AUG 1 STS 50.00000 78.00000 430 A WR 2.4 2.4 1,3,4,9,r

150 1962 145 1962 AUG 3 STS 50.00000 78.00000 180 A WR 1.6 1.6 1,3,4,9,r

151 1962 146 1962 AUG 4 STS 50.00000 78.00000 390 A WR 3.8 3.8 3.8 A 1,3,4,5,9,r

152 1962 147 1962 AUG 5 09:08:45.8 NZ-MB? 74.20000 52.50000 3600 A-AD WR 21100 21100 5.20 TN A 2,3,4,aa

153 1962 148 1962 AUG 7 03:00 STS 50.00000 78.00000 0 AS WR 9.9 9.9 A 1,3,4,5,9,r

154 1962 149 1962 AUG 10 09:00 NZ 73.00000 55.00000 C 1560 A WR 150 1500<1000 400 A 2,3,4,5

155 1962 150 1962 AUG 18 STS 50.00000 78.00000 710 A WR 7.4 7.4 1,3,4,9,r

156 1962 151 1962 AUG 18 STS 50.00000 78.00000 310 A WR 5.8 5.8 1,3,4,9,r

157 1962 152 1962 AUG 20 09:02:14.1 NZ-MB? 74.30000 51.50000 2500 A WR 2800 2800 4.60 TN A 2,3,aa

158 1962 153 1962 AUG 21 STS 50.00000 78.00000 590 A WR 20 15020-27 kt? 23 1,3,4,9,r

159 1962 154 1962 AUG 22 09:00:04.2 NZ-MB 74.00000 53.30000 1700 A WR 1600 9000 1600 4.40 TN A 2,3,y,aa

160 1962 155 1962 AUG 22 NZ 73.00000 55.00000 60 0 MX AW-CM WR 6 6 KSR-2 wh \* 2,3,4

161 1962 156 1962 AUG 22 STS 50.00000 78.00000 740 A WR 3 3 1,3,4,9,r

162 1962 157 1962 AUG 23 STS 50.00000 78.00000 680 A WR 2.5 2.5 1,3,4,9,r

163 1962 159 1962 AUG 25 05:40 STS 50.00000 78.00000 715 A WR 0.001 20 1 A 1,3,4,5,9,r

164 1962 158 1962 AUG 25 09:00 NZ 73.00000 55.00000 2980 A WR 1500 1000010000 ? 10000 TN A 2,3,4,5,y

165 1962 160 1962 AUG 27 09:00:50.9 NZ-MB? 74.70000 50.30000 3000 A WR 4200 14000 4200 4.70 TN A 2,3,y,aa

166 1962 161 1962 AUG 27 STS 50.00000 78.00000 245 A WR 11 11 1,3,4,9,r

167 1962 162 1962 AUG 31 STS 50.00000 78.00000 700 A FS 2.7 2.7 1,3,4,9,r

168 1962 163 1962 SEP 2 NZ 73.00000 55.00000 1300 A WR 80 80 A 2,3

169 1962 X 1962 SEP 6 STS 50.00000 78.00000 A 0.001 MX 0 P 1,3,4,5,9,r

170 1962 164 1962 SEP 8 10:17:57.7 NZ-MB? 73.70000 53.80000 1725 A WR 1900 1900 4.40 TN A 2,3,aa

171 1962 165 1962 SEP 15 08:02:13.9 NZ-MB? 74.40000 51.50000 A WR 3100 3100 4.60 TN A 2,3,aa

172 1962 166 1962 SEP 16 10:59:10.5 NZ-MB? 74.20000 51.60000 A WR 3250 3250 4.60 TN A 2,3,aa

173 1962 167 1962 SEP 18 08:29:02.7 NZ-MB? 73.20000 54.70000 2000 A WR 1350 1350 4.30 TN A 2,3,aa

174 1962 X 1962 SEP 18 STS 50.00000 78.00000 A 20 MX 10 P 1,3,4,5,9,r

175 1962 168 1962 SEP 19 11:00:56.4 NZ-MB? 73.80000 53.80000 3280 A WR 1500 1000020000 10000 4.90 TN Ch-70?A 2,3,5,k,aa

176 1962 169 1962 SEP 21 08:00 NZ 73.00000 55.00000 3000 A WR 2400 2400 TN A 2,3,4

177 1962 170 1962 SEP 22 STS 50.00000 78.00000 0 AS SE 0.21 0.21 1,3,4,9,r

178 1962 171 1962 SEP 24 STS 50.00000 78.00000 630 A WR 1.2 1.2 1,3,4,9,r

179 1962 172 1962 SEP 25 STS 50.00000 78.00000 0 AS WR 7 7 1,3,4,9,r

180 1962 173 1962 SEP 25 13:02:31.7 NZ-MB? 73.70000 55.00000 4090 A WR 19100 25000 19100 TN Ch-70 A 2,3,4,5

181 1962 174 1962 SEP 27 08:03:16.4 NZ-MB 74.30000 52.40000 3900 A WR 10000 5000015000 20000 5.10 TN KB-11 A 2,3,4,aa

182 1962 175 1962 SEP 28 STS 50.00000 78.00000 695 A FS 1.3 1.3 1,3,4,9,r

183 1962 176 1962 OCT 7 16:32 NZ 73.00000 55.00000 1440 A WR 320 3000 320 A 2,3,4,z

184 1962 177 1962 OCT 9 STS 50.00000 78.00000 645 A WR 8 8 1,3,4,9,r

185 1962 178 1962 OCT 9 NZ 73.00000 55.00000 3000 A WR 15 15 2,3

186 1962 179 1962 OCT 10 STS 50.00000 78.00000 665 A WR 9.2 9.2 1,3,4,9,r

187 1962 180 1962 OCT 13 STS 50.00000 78.00000 720 A WR 4.9 4.9 1,3,4,9,r

188 1962 181 1962 OCT 14 STS 50.00000 78.00000 725 A WR 0.001 20 10 A 1,3,4,5,9,r

189 1962 182 1962 OCT 20 STS 50.00000 78.00000 635 A WR 6.7 6.7 1,3,4,9,r

190 K Project 184 K3 1962 OCT 22 03:40:45 MTR 49.00000 46.00000 ? 290000 AX-R WE 300 200 300 A \* 2,3,4,5,x,z

191 1962 183 1962 OCT 22 09:06:10.1 NZ-MB? 73.40000 54.90000 3230 A WR 8200 26000 8200 4.90 TN A 2,3,z,aa

192 1962 185 1962 OCT 27 07:35 NZ 73.00000 55.00000 1550 A WR 260 3000 260 A 2,3,5,z

193 1962 186 1962 OCT 28 STS 50.00000 78.00000 670 A WR 7.8 7.8 A 1,3,4,5,9,r

194 K Project 187 K4 1962 OCT 28 04:41:20 MTR 49.00000 46.00000 ? 150000 AX-R WE 300 300 A \* 2,3,4,5,x

195 1962 188 1962 OCT 28 STS 50.00000 78.00000 645 A WR 7.8 7.8 1,3,4,9,r

196 1962 189 1962 OCT 29 07:35 NZ 73.00000 55.00000 1550 A WR 360 4000 360 A 2,3,4,z

197 1962 190 1962 OCT 30 STS 50.00000 78.00000 0 AS WR 1.2 1.2 1,3,4,9,r

198 1962 191 1962 OCT 30 NZ 73.00000 55.00000 1500 A WR 280 280 A 2,3

199 1962 192 1962 OCT 31 STS 50.00000 78.00000 690 A WR 10 10 1,3,4,9,r

200 1962 194 1962 NOV 1 06:30 NZ 73.00000 55.00000 ? 1500 A WR 240 1500 240 A 2,3,4,5,z

201 K Project 195 K5 1962 NOV 1 09:12 MTR 49.00000 46.00000 ? 59000 AH-R WE 300 300 \* 2,3,4,ab

202 1962 193 1962 NOV 1 09:20 STS 50.00000 78.00000 ?C 700 A WR 3 3 A 1,3,4,5,9,r

203 1962 196 1962 NOV 3 08:31 NZ 73.00000 55.00000 1500 A WR 390 4000 390 A 2,3,4,z

204 1962 197 1962 NOV 3 NZ 73.00000 55.00000 4000 A WR 45 45 A 2,3

205 1962 198 1962 NOV 3 STS 50.00000 78.00000 710 A WR 4.7 4.7 1,3,4,9,r

206 1962 199 1962 NOV 4 STS 50.00000 78.00000 600 A WR 8.4 8.4 Extra A 1,3,4,5,9,r

207 1962 200 1962 NOV 5 STS 50.00000 78.00000 15 AS-T WE 0.4 0.4 1,3,4,9,r

208 1962 201 1962 NOV 11 STS 50.00000 78.00000 8 AS-T WR 0.1 0.1 1,3,4,9,r

209 1962 202 1962 NOV 13 STS 50.00000 78.00000 0 AS WR 0 0.001 0.001 1,3,4,9,r

210 1962 203 1962 NOV 14 STS 50.00000 78.00000 660 A WR 12 12 1,3,4,9,r

211 1962 204 1962 NOV 17 STS 50.00000 78.00000 715 A WR 18 18 A 1,3,4,5,9,r

212 1962 205 1962 NOV 24 STS 50.00000 78.00000 0 AS SE 0 0.001 0.001 1,3,4,9,r

213 1962 206 1962 NOV 26 STS 50.00000 78.00000 0 AS SE 0.031 0.031 1,3,4,9,r

214 1962 207 1962 DEC 1 STS 50.00000 78.00000 680 A WR 2.4 2.4 1,3,4,9,r

215 1962 208 1962 DEC 18 10:45 NZ 73.00000 55.00000 1600 A WR 110 200 110 A 2,3,z

216 1962 209 1962 DEC 18 NZ 73.00000 55.00000 1500 A FS 69 69 A 2,3

217 1962 210 1962 DEC 20 NZ 73.00000 55.00000 1070 A WR 8.3 8.3 A 2,3

218 1962 211 1962 DEC 22 NZ 73.00000 55.00000 1050 A WR 6.3 6.3 A 2,3

219 1962 212 1962 DEC 23 11:15 NZ 73.00000 55.00000 1460 A WR 430 1500 430 A 2,3,4,z

220 1962 213 1962 DEC 23 NZ 73.00000 55.00000 1470 A WR 8.3 8.3 2,3

221 1962 214 1962 DEC 23 NZ 73.00000 55.00000 1270 A WR 2.4 2.4 2,3

222 1962 215 1962 DEC 23 STS 50.00000 78.00000 0 AS SE 0 0.001 0.001 1,3,4,9,r

223 1962 216 1962 DEC 24 STS 50.00000 78.00000 0 AS SE 0.007 0.007 1,3,4,9,r

224 1962 217 1962 DEC 24 STS 50.00000 78.00000 0 AS SE 0.028 0.028 1,3,4,9,r

225 1962 218 1962 DEC 24 10:44:21.9 NZ-MB? 74.20000 52.30000 1320 A WR 1100 8000 1100 TN A 2,3,z

226 1962 219 1962 DEC 24 11:11:42.0 NZ-MB? 73.60000 57.50000 3750 A WR 24200 20000 24200 TN Ch-70 A \* 2,3,4,z

227 1962 220 1962 DEC 25 13:35:57.2 NZ-MB? 73.40000 56.50000 2250 A WR 3100 9000 3100 TN A 1,2,3,z

228 1962 221 1962 DEC 25 NZ 73.00000 55.00000 990 A WR 8.5 8.5 8.5 1,2,3

229 1964 222 1964 MAR 15 08:00:00.4 STS-D 49.82083 78.09861 A A-6 710 A UG-T WE 20 150 23 S 37 5.56 C A 1,3,4,5,6,9,r

230 1964 223 1964 MAY 16 06:00:59.8 STS-D 49.81778 78.09389 A A-4 -260 698 A UG-T WR 20 150 23.7 23.7 5.55 C A 1,3,4,5,6,9,r

231 1964 224 1964 JUN 6 STS-D 49.77472 77.98806 A V-2 700 A UG-T FS 0.001 20 1.6 4.42 1,3,4,6,9,r

232 1964 225 1964 JUL 19 06:00:00.6 STS-D 49.81500 78.09306 A A-5 695 A UG-T FS 20 150 14 S 26 5.43 A 1,3,4,5,6,9,r

233 1964 226 1964 AUG 18 06:00:00.0 STS-D 49.82056 78.08194 A A-8Sh 700 A UG-T WR 0.001 20 2 S 0.07 3.27 V A 1,3,4,5,6,9,r

234 1964 227 1964 SEP 18 08:00:00.4 NZ-NS 73.66700 54.53300 G -130 D UG-T FS 0.001 20 2 S 2 4.19 V 3.8 kCi Ch-70 1,3,4,9,r

235 1964 228 1964 SEP 30 STS-D 49.82083 78.09861 A A-6Sh 710 A UG-T FS 0.001 20 V 1,3,4,6,9,r

236 1964 229 1964 OCT 25 07:59:58.1 NZ-NS 73.38700 54.98500 B -400 D UG-T PR 0.001 20 8.4 S 20 5.10 V 1 MCi Ch-70 A 1,3,4,5,9,r

237 1964 230 1964 NOV 16 06:00:00.2 STS-D 49.81389 78.13361 A 3-5 730 A UG-T PR 20 150 47 5.64 C A 1,3,4,5,6,9,r

238 1965 231 Chagan 1965 JAN 15 06:00:00.8 STS-B 49.93500 79.00936 A 1004 -178 A UG-S I-EM 140 125 S 140 5.87 415 S \* 1,3,4,5,6,9,r

239 1965 232 1965 FEB 4 06:00:00.0 STS-D 49.77306 77.99139 A A -262 726 A UG-T FS 0.001 20 44 44 5.10 C 1,3,4,6,9,r

240 1965 233 1965 MAR 3 06:14:59.4 STS-D 49.82972 78.05750 A Hz-3 625 A UG-T WR 0.001 20 18 S 27 5.44 A 1,3,4,5,6,9,r

241 1965 234 1965 MAR 27 06:30:00.0 STS-D 49.77472 77.98806 A V-2P 700 A UG-T WR 0.001 20 0.06 3.22 1,3,4,6,9,r

242 1965 235 Butan-1 S 1965 MAR 30 08:00:00.0 -RU-BK 52.90000 56.50000 617 -1340 UG-S I-OS 2.3 2.3 C 1,3,4,9,r

243 1965 235 Butan-2 SS 1965 MAR 30 08:00:00 -RU-BK 52.90000 56.50000 \* 618 -1375 UG-S I-OS 2.3 2.3 C 1,3,4,9,r

244 1965 236 1965 MAY 11 06:40:00.2 STS-D 49.77306 77.99139 A A-P 726 A UG-T WR 0.001 20 4.5 S 14 5.20 A 1,3,4,5,6,9,r

245 1965 237 Butan 1965 JUN 10 07:00:00.0 -RU-BK 52.90000 56.50000 622 -1350 UG-S I-OS 7.6 7.6 C 1,3,4,9,r

246 1965 238 1965 JUN 17 03:45:00.0 STS-D 49.83056 78.05778 A Zh-1 630 A UG-T PR 0.001 20 9.2 S 24 5.40 C A 1,3,4,5,6,9,r

247 1965 239 1965 JUL 29 03:05:00.2 STS-D 49.78500 77.99694 A A-1Sh 700 A UG-T FS 0.001 20 1.8 S 1.1 4.28 C A 1,3,4,5,6,8,9,1

248 1965 240 1965 SEP 17 04:00:00.1 STS-D 49.81722 78.14250 A 1 685 A UG-T WR 0.001 20 9.2 S 15 5.22 C A 1,3,4,5,6,9,r

249 1965 241 1965 OCT 8 06:00:00.4 STS-D 49.83056 78.10139 A 3-1 630 A UG-T WR 0.001 20 14 S 29 5.47 C A 1,3,4,5,6,9,r

250 1965 242 Sary-Uzen 1965 OCT 14 04:00:00.2 STS-SU 49.99064 77.63572 A 1003 -48 A UG-S I-EM 1.1 1.1 4.28 130 \* 1,3,4,6,8,9,r,a

251 1965 243 1965 NOV 21 04:58:00.0 STS-D 49.82833 78.05972 A Zh-2 650 A UG-T WR 29 23 S 29 5.61 C A 1,3,4,5,6,9,r

252 1965 244 1965 DEC 24 05:00:00.2 STS-D 49.81167 78.10750 A 3-3 781 A UG-T PR 0.001 20 5.7 S 6.7 4.94 A 1,3,4,5,6,9,r

253 1966 245 1966 FEB 13 04:58:00.1 STS-D 49.81417 78.13083 A E-1 -320 730 A UG-T PR 125 81 S 125 6.26 C A 1,3,4,5,6,9,r

254 1966 246 1966 MAR 20 05:50:00.3 STS-D 49.75167 78.00833 A 11 -310 765 A UG-T WR 100 61 S 100 6.04 C A 1,3,4,5,6,9,r

255 1966 247 1966 APR 21 03:58:00.1 STS-D 49.81778 78.09389 A A-4P 698 A UG-T PR 0.001 20 11 S 22 5.37 C A 1,3,4,5,6,9,r

256 1966 248 Galit 1966 APR 22 02:58:00.3 -KZ-BA 47.82900 47.93500 A-I -165 UG-S I-CV 1.1 1.1 S 1.1 4.70 V S 1,3,4,5,9,r

257 1966 249 1966 MAY 7 03:58:00.2 STS-D 49.73611 78.10722 A 25 739 A UG-T PR 4 3.6 S 4 4.80 C A 1,3,4,5,6,9,r

258 1966 250 1966 JUN 29 06:58:00.5 STS-D 49.83917 78.07083 A 3-6 600 A UG-T PR 20 150 23 S 42 5.60 C A 1,3,4,5,6,9,r

259 1966 251 1966 JUL 21 03:58:00.0 STS-D 49.73556 78.10472 A 24 673 A UG-T WR 20 150 11 S 24 5.40 A 1,3,4,5,6,9,r

260 1966 252 1966 AUG 5 03:57:59.6 STS-D 49.75889 78.04861 A 17 748 A UG-T WR 0.001 20 14 S 32 5.50 A 1,3,4,5,6,9,r

261 1966 253 1966 AUG 19 03:52:59.9 STS-D 49.83056 78.10139 A 3-1P 630 A UG-T PR 0.001 20 7.3 S 10 5.10 C A 1,3,4,5,6,9,r

262 1966 254 1966 SEP 7 03:51:59.7 STS-D 49.83056 78.05778 A Zh-1P 630 A UG-T FS 0.001 20 3.6 S 4.6 4.80 A 1,3,4,5,6,9,r

263 1966 255 Urta-Bulak 1966 SEP 30 05:59:51.0 -UZ 38.96800 64.51700 1-s -1532 UG-S I-FE 30 30 30 5.10 C KB-11 S 1,3,4,5,9,r

264 1966 256 1966 OCT 19 03:57:59.9 STS-D 49.74194 78.02556 A 13 721 A UG-T WR 20 150 23 S 55 5.70 C A 1,3,4,5,6,9,r

265 1966 258 1966 OCT 27 05:57:58.1 NZ-NS 73.38700 54.83600 A-2 -700 D UG-T WR 150 1500 420 S> 700 6.49 V 10 MCi KB-11 A 1,3,4,5,9,f,r

266 1966 257 1966 OCT 27 06:00 NZ-NS 73.40000 54.80000 \* A-1 UG-T WR 150 1500 700 KB-11 1,3,4,9

267 1966 259 1966 OCT 29 03:58:00.0 STS-D 49.78472 77.99944 A G 705 A UG-T WR 0.001 20 1,3,4,6,9,r

268 1966 260 1966 NOV 19 03:58:00.0 STS-D 49.82972 78.05750 A Zh-3P 625 A UG-T WR 0.001 20 1,3,4,6,9,r

269 1966 261 S 1966 DEC 3 05:02:00.2 STS-D 49.74028 78.03083 A 14 665 A UG-T WR 0.001 20 3.6 S 4.6 4.80 C A 1,3,4,5,6,9,r

270 1966 261 SS 1966 DEC 3 05:02:00.2 STS-D 49.74028 78.03083 A 14 665 A UG-T PR 0.001 20 C 1,3,4,6,9,r

271 1966 262 1966 DEC 18 04:58:00.0 STS-SU 49.92458 77.74722 A 101 A UG-S PR 20 150 38 S 100 5.92 V A 1,3,4,5,6,8,9,r

272 1967 263 S 1967 JAN 30 04:01:59.5 STS-D 49.77306 77.99000 A 611 727 A UG-T WR 0.001 20 3.6 S 4.6 4.80 C A 1,3,4,5,6,9,r

273 1967 263 SS 1967 JAN 30 04:01:59.5 STS-D 49.77306 77.99000 A 611 727 A UG-T WR 0.001 20 C 1,3,4,6,9,r

274 1967 264 1967 FEB 26 03:57:59.8 STS-D 49.73944 78.08639 A 21 676 A UG-T FS 20 150 61 S 130 6.03 A 1,3,4,5,6,8,9,r

275 1967 265 S 1967 MAR 25 05:58:01.1 STS-D 49.75333 78.05361 A 19 728 A UG-T WR 0.001 20 11 S 18 5.30 A 1,3,4,5,6,9,r

276 1967 265 SS 1967 MAR 25 05:58:01.1 STS-D 49.75333 78.05361 A 19 728 A UG-T WE 0.001 20 1,3,4,6,9,r

277 1967 266 1967 APR 20 04:08:00.0 STS-D 49.73611 78.10722 A 25P 739 A UG-T PR 20 150 18 S 37 5.56 C A 1,3,4,5,6,8,9,r

278 1967 267 S 1967 MAY 28 04:07:59.6 STS-D 49.75167 78.00833 A 11P 765 A UG-T PR 0.001 20 14 S 28 5.46 V A 1,3,4,5,6,8,9,r

279 1967 267 SS 1967 MAY 28 04:07:59.6 STS-D 49.75167 78.00833 A 11P 765 A UG-T PR 0.001 20 V 1,3,4,6,9,r

280 1967 268 1967 JUN 29 02:56:59.9 STS-D 49.82222 78.04333 A 703 653 A UG-T WR 0.001 20 11 S 20 5.34 C A 1,3,4,5,6,8,9,r

281 1967 269 1967 JUL 15 03:26:59.9 STS-D 49.84417 78.11556 A 506 580 A UG-T PR 0.001 20 14 S 23 5.39 C A 1,3,4,5,6,8,9,r

282 1967 270 S 1967 AUG 4 06:58:00.3 STS-D 49.75444 78.05028 A 18 537 A UG-T WR 0.001 20 11 S 19 5.32 A 1,3,4,5,6,8,9,r

283 1967 270 SS 1967 AUG 4 06:58:00.3 STS-D 49.75444 78.05028 A 18 537 A UG-T WR 0.001 20 1,3,4,6,9,r

284 1967 271 1967 SEP 2 04:04:00.0 STS-D 49.74194 78.02556 A 13P 721 A UG-T WR 0.001 20 0.7 4.10 1,3,4,6,8,9,r

285 1967 272 1967 SEP 16 04:04:00.3 STS-SU 49.93719 77.72811 A 102 A UG-S WR 0.001 20 11 S 16 5.25 A 1,3,4,5,6,8,9,r

286 1967 273 1967 SEP 22 05:03:59.0 STS-SU 49.95964 77.69106 A 105 A UG-S WR 10 9.2 S 10 5.16 C A 1,3,4,5,6,8,9,r

287 1967 274 Tavda 1967 OCT 6 06:59:57.5 -RU-T 57.70000 65.20000 ? -170 UG-S I-CV 0.3 5.2 S 0.3 4.70 C A 1,3,4,5,9,r

288 1967 275 S 1967 OCT 17 05:04:00.2 STS-D 49.78444 77.99778 A B 698 A UG-T PR 0.001 20 23 S 45 5.63 C A 1,3,4,5,6,8,9,r

289 1967 275 SS 1967 OCT 17 05:04:00.2 STS-D 49.78444 77.99778 A B 698 A UG-T PR 0.001 20 C 1,3,4,6,9,r

290 1967 276 S 1967 OCT 21 04:59:58.49 NZ-NS 73.39000 54.81000 A-4 -600 D UG-T WR 150 1500 260 T\* 260 5.98 V 10 Ci KB-11 A 1,3,4,5,8,9,r

291 1967 276 SS 1967 OCT 21 04:59:59 NZ-NS 73.40000 54.80000 \* A-5 -500 D UG-T WR 20 150 C Ch-70 1,3,4,9,r

292 1967 277 1967 OCT 30 06:04:00.0 STS-D 49.79722 77.99944 A 501 670 A UG-T WR 0.001 20 11 S 25 5.41 C A 1,3,4,5,6,8,9,r

293 1967 278 1967 NOV 22 04:03:59.9 STS-SU 49.94194 77.68683 A 106 A UG-S WR 0.001 20 3.6 S 1.6 4.41 C A 1,3,4,5,6,8,9,r

294 1967 279 1967 DEC 8 06:03:59.8 STS-D 49.81833 78.17083 A 507 504 A UG-T WR 0.001 20 14 S 19 5.31 A 1,3,4,5,6,8,9,r

295 1968 280 1968 JAN 7 03:46:59.9 STS-D 49.75389 78.04694 A 810 698 A UG-T PR 0.001 20 7.3 S 7.5 4.98 V A 1,3,4,5,6,8,9,r

296 1968 281 1968 APR 24 10:35:59.7 STS-D 49.84167 78.10722 A 505 587 A UG-T WR 0.001 20 5.7 S 6.2 4.91 A 1,3,4,5,6,8,9,r

297 1968 282 Pamuk 1968 MAY 21 03:59:12.0 -UZ 38.91800 65.03200 ? -2440 UG-S I-FE 47 47 47 5.40 C Ch-70 S 1,3,4,5,9,r

298 1968 283 1968 MAY 23 STS-D 49.83333 78.09278 A 504 617 A UG-T WR 0 0.001 0.001 C 1,3,4,6,9,r

299 1968 284 1968 JUN 11 03:05:59.7 STS-D 49.79861 78.15000 A 605 660 A UG-T WR 0.001 20 9.2 S 15 5.24 A 1,3,4,5,6,8,9,r

300 1968 285 1968 JUN 19 05:05:59.8 STS-B 49.98025 78.98550 A 1053 A UG-S FS 0.001 20 18 18 5.28 C A 1,3,4,5,6,9,r

301 1968 286 Galit 1968 JUL 1 04:02:00.5 -KZ-BA 47.90900 47.91200 A-II -590 UG-S I-CV 27 25 27 5.50 S 1,3,4,5,9,r

302 1968 287 S 1968 JUL 12 12:08:00.0 STS-D 49.75556 78.09917 A 608 -172 642 A UG-T WR 0.001 20 11 S 24 5.40 A 1,3,4,5,6,9,r

303 1968 287 SS 1968 JUL 12 12:08:00.0 STS-D 49.75556 78.09917 A 608 642 A UG-T WR 0.001 20 1,3,4,6,9,r

304 1968 288 S 1968 AUG 20 04:05:59.6 STS-D 49.82056 78.08111 A A-7 705 A UG-T WR 0.001 20 3.6 S 4.6 4.80 A 1,3,4,5,6,9,r

305 1968 288 SS 1968 AUG 20 04:05:59.6 STS-D 49.82056 78.08111 A A-7 705 A UG-T SE 0 0.001 0.001 1,3,4,6,9,r

306 1968 289 1968 SEP 5 04:05:59.6 STS-D 49.73806 78.08083 A 509 651 A UG-T WE 0.001 20 14 S 32 5.50 C A 1,3,4,5,6,9,r

307 1968 290 Argon 1968 SEP 29 03:43:00.0 STS-D 49.80417 78.10556 A E-2 675 A UG-T WE 60 38 S 60 5.80 C A 1,3,4,5,6,9,r

308 1968 291 Telkem-1 1968 OCT 21 03:52:00.0 STS-T 49.72786 78.48628 A 2308 -31.4 A UG-S I-EM 0.24 0.24 4.05 70 \* 1,3,4,6,9,r,ap

309 1968 292 1968 OCT 29 03:54:00.0 STS-D 49.83333 78.09278 A 504P 617 A UG-T WR 0.001 20 1,3,4,6,9,r

310 1968 293 S 1968 NOV 7 10:02:05.49 NZ-NS 73.38700 54.85800 A-3 -1000 D UG-T WR 0 0.001 330 T\* 0.001 6.13 V 10 kCi Ch-70 A 1,3,4,5,8,9,r

311 1968 293 SS 1968 NOV 7 10:02:05.5 NZ-NS 73.38700 54.85800 A-3 UG-T WR 150 1500 165 Ch-70 1,3,4,9,r

312 1968 293 SS 1968 NOV 7 10:02:05.5 NZ-NS 73.38700 54.85800 A-3 UG-T WR 150 1500 165 Ch-70 1,3,4,9,r

313 1968 294 1968 NOV 9 02:54:00.1 STS-D 49.79972 78.14444 A 606 724 A UG-T PR 0.001 20 4.5 S 4 4.75 C A 1,3,4,5,6,8,9,r

314 1968 295 Telkem-2 S 1968 NOV 12 07:30:00.0 STS-T 49.71200 78.46100 A 2305 -31.4 A UG-S I-EM 0.24 0.24 4.24 64 \* 1,3,4,6,9,r,ap

315 1968 295 Telkem-2 SS 1968 NOV 12 07:30:00 STS-T 49.70000 78.50000 \* 2306 UG-S I-EM 0.24 0.24 64 \* 1,3,4,9,r,ap

316 1968 295 Telkem-2 SS 1968 NOV 12 07:30:00 STS-T 49.70000 78.50000 \* 2307 UG-S I-EM 0.24 0.24 64 \* 1,3,4,9,r,ap

317 1968 296 1968 DEC 18 05:01:59.7 STS-D 49.74083 78.08778 A 508 -194 670 A UG-T PR 0.001 20 5.7 S 8.9 5.04 C A 1,3,4,5,6,8,9,r

318 1969 297 1969 MAR 7 08:26:59.8 STS-D 49.82833 78.05972 A ZG-2P 650 A UG-T WR 20 150 23 S 49 5.66 C A 1,3,4,5,6,8,9,r

319 1969 298 1969 APR 4 04:57:00.0 STS-D 49.75333 78.05361 A 19P 728 A UG-T WR 0.001 20 1,3,4,6,9,r

320 1969 299 1969 APR 13 STS-D 49.73556 78.10472 A 24P 673 A UG-T PR 0.001 20 1,3,4,6,9,r

321 1969 300 1969 MAY 16 04:02:59.7 STS-D 49.76778 78.08167 A 709 629 A UG-T WR 0.001 20 9.2 S 16 5.26 C A 1,3,4,5,6,8,9,r

322 1969 301 1969 MAY 31 05:01:59.4 STS-SU 49.95031 77.69422 A 108 A UG-S WR 0.001 20 11 S 18 5.29 A 1,3,4,5,6,8,9,r

323 1969 302 S 1969 JUL 4 02:46:59.6 STS-D 49.75417 78.10917 A 710 599 A UG-T PR 0.001 20 9.2 S 15 5.24 A 1,3,4,5,6,8,9,r

324 1969 302 SS 1969 JUL 4 02:46:59.6 STS-D 49.75417 78.10917 A 710 599 A UG-T WR 0.001 20 1,3,4,6,9,r

325 1969 303 1969 JUL 23 02:47:00.2 STS-D 49.81972 78.13722 A 801 659 A UG-T WR 16 14 16 5.50 C A 1,3,4,5,6,9,r

326 1969 304 Grifon-1 1969 SEP 2 04:59:58.6 -RU-P 57.22000 55.39300 1001 -1210 UG-S I-OS 7.6 8 7.6 4.80 C S 1,3,4,5,9,r

327 1969 305 Grifon-2 1969 SEP 8 04:59:58.7 -RU-P 57.22000 55.41700 1002 -1210 UG-S I-OS 7.6 8 7.6 4.80 C S 1,3,4,5,9,r

328 1969 306 S 1969 SEP 11 04:02:00.0 STS-D 49.77778 77.98639 A 503 682 A UG-T PR 0.001 20 5.7 S 6.2 4.91 C A 1,3,4,5,6,8,9,r

329 1969 306 SS 1969 SEP 11 04:02:00.0 STS-D 49.77778 77.98639 A 503 682 A UG-T PR 0.001 20 C 1,3,4,6,9,r

330 1969 307 1969 SEP 26 06:59:58.1 -RU 45.84800 42.60000 ? -725 UG-S I-OS 10 10 5.60 C A \* 1,3,4,5,9,r

331 1969 308 S 1969 OCT 1 04:02:59.9 STS-D 49.78639 78.10806 A 607 634 A UG-T WR 0.001 20 9.2 S 16 5.26 C A 1,3,4,5,6,8,9,r

332 1969 308 SS 1969 OCT 1 04:02:59.9 STS-D 49.78639 78.10806 A 607 634 A UG-T WR 0.001 20 C 1,3,4,6,9,r

333 1969 309 S 1969 OCT 14 07:00:06.61 NZ-NS 73.39000 54.78700 A-7 -500 D UG-T WR 20 150 540 T\* 540 6.30 C KB-11/A 1,3,4,5,8,9,r

334 1969 309 SS 1969 OCT 14 07:00:06.6 NZ-NS 73.39000 54.78700 A-7 UG-T WR 150 1500 C KB-11/Ch-71,3,4,9,r

335 1969 309 SS 1969 OCT 14 07:00:07 NZ-NS 73.40000 54.80000 \* A-9 -520 \*\* UG-T WR 150 1500 V >1 kCi KB-11/Ch-71,3,4,9,r

336 1969 310 1969 OCT 30 STS-D 49.84417 78.11556 A 506P 580 A UG-T SE 0.001 20 1,3,4,6,9,r

337 1969 311 1969 NOV 27 05:02:00.0 STS-D 49.83667 78.05972 A 511 600 A UG-T PR 0.001 20 1,3,4,6,9,r

338 1969 312 1969 NOV 30 03:32:59.7 STS-B 49.92428 78.95575 A 1054 A UG-S WR 125 54 S 125 6.02 A 1,3,4,5,6,9,r

339 1969 313 Say-Utes-1 1969 DEC 6 07:02:59.9 -KZ-MA 43.86700 54.80000 2-T -410 UG-S I-EM 30 70 S 30 5.80 C A \* 1,3,4,5,9,r

340 1969 314 1969 DEC 28 03:47:00.2 STS-SU 49.93733 77.71422 A 107 A UG-S WR 40 30 S 40 5.79 C A 1,3,4,5,6,8,9,r

341 1969 315 1969 DEC 29 04:02:00.0 STS-D 49.73222 78.10444 A Sh-1 496 A UG-T PR 0.001 20 7.3 S 10 5.10 A 1,3,4,5,6,9,r

342 1970 316 S 1970 JAN 29 07:03:00.0 STS-D 49.79222 78.11306 A 802 727 A UG-T WE 0.001 20 18 S 42 5.60 C A 1,3,4,5,6,8,9,r

343 1970 316 SS 1970 JAN 29 07:03:00.0 STS-D 49.79222 78.11306 A 802 727 A UG-T WE 0.001 20 C 1,3,4,6,9,r

344 1970 316 SS 1970 JAN 29 07:03:00.0 STS-D 49.79222 78.11306 A 802 727 A UG-T WE 0.001 20 C 1,3,4,6,9,r

345 1970 317 1970 FEB 18 STS-D 49.73083 78.10250 A Sh-2 700 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

346 1970 318 1970 MAR 27 05:02:59.6 STS-D 49.74444 78.00333 A 610 698 A UG-T PR 0.001 20 5.7 S 6.5 4.93 A 1,3,4,5,6,8,9,r

347 1970 319 1970 MAY 27 04:03:00.0 STS-D 49.73139 78.10111 A Sh-3 580 A UG-T WR 0.001 20 0.29 S 0.9 4.20 C A 1,3,4,5,6,9,r

348 1970 320 Magistral 1970 JUN 25 04:59:55.5 -RU-O 52.20000 55.70000 1T-2S -700 UG-S I-CV 2.3 8.4 S 2.3 4.90 C A \* 1,3,4,5,9,r

349 1970 321 1970 JUN 28 01:58:00.0 STS-D 49.79333 78.11306 A 510 -332 656 A UG-T WR 20 150 30 S 88 5.87 C A 1,3,4,5,6,8,9,r

350 1970 322 S 1970 JUN 28 01:58 STS-D 49.78222 78.05333 ?A 705 650 A UG-T PR 0.001 20 C 1,3,4,6,9,r

351 1970 322 SS 1970 JUN 28 01:58 STS-D 49.78222 78.05333 ?A 705 650 A UG-T WR 0.001 20 C 1,3,4,6,9,r

352 1970 323 1970 JUL 21 03:02:59.7 STS-SU 49.95242 77.67289 A 104 A UG-S WR 0.001 20 14 S 23 5.38 C A 1,3,4,5,6,8,9,r

353 1970 324 1970 JUL 24 03:57:00.0 STS-D 49.81361 78.13222 A 120 732 A UG-T WR 0.001 20 11 S 20 5.34 C A 1,3,4,5,6,8,9,r

354 1970 325 1970 SEP 6 04:03 STS-D 49.78889 77.99750 ?A 502 680 A UG-T WR 0.001 20 1,3,4,6,9,r

355 1970 326 1970 SEP 6 04:02:59.9 STS-D 49.75250 78.00528 A 8 752 A UG-T PR 0.001 20 14 S 34 5.53 C A 1,3,4,5,6,8,9,r

356 1970 327 S 1970 OCT 14 05:59:57.57 NZ-NS 73.30400 55.02700 A-6 -1200 D UG-T WR 150 1500 2200 T\* 2200 6.79 V 2 MCTN? KB-11 A 1,3,4,5,8,9,r

357 1970 327 SS 1970 OCT 14 05:59:57.6 NZ-NS 73.30400 55.02700 A-6 UG-T WR 150 1500 KB-11 1,3,4,9,r

358 1970 327 SS 1970 OCT 14 05:59:57.6 NZ-NS 73.30400 55.02700 A-6 UG-T WR 150 1500 KB-11 1,3,4,9,r

359 1970 328 1970 NOV 4 06:02:59.8 STS-SU 49.98922 77.76244 A 125 A UG-S PR 0.001 20 14 S 27 5.44 A 1,3,4,5,6,8,9,r

360 1970 329 Say-Utes-2 1970 DEC 12 07:00:59.8 -KZ-MA 43.85000 54.80000 6T -740 UG-S I 80 113 S 80 6.00 C A 1,3,4,5,9,r

361 1970 330 1970 DEC 17 07:01:00.0 STS-D 49.75194 78.10167 A 193 624 A UG-T WR 20 150 14 S 26 5.43 C A 1,3,4,5,6,8,9,r

362 1970 331 Say-Utes-3 1970 DEC 23 07:00:59.8 -KZ-MA 44.02500 54.93300 1-T -500 UG-S I 75 113 S 75 6.00 C A 1,3,4,5,9,r

363 1971 332 1971 JAN 29 05:03:00.0 STS-D 49.80528 78.16861 A 114 657 A UG-T WE 0.001 20 1.8 4.47 1,3,4,6,8,9,r

364 1971 333 1971 MAR 22 04:33:00.3 STS-D 49.79333 78.11306 A 510P 656 A UG-T PR 20 150 30 S 67 5.77 C A 1,3,4,5,6,8,9,r

365 1971 334 1971 MAR 22 04:33 STS-D 49.77444 78.08278 ?A 807 601 A UG-T WR 0.001 20 1,3,4,6,9,r

366 1971 335 Taiga S 1971 MAR 23 06:59:58.4 -RU-P 61.40000 56.20000 1B -128 UG-S I-EM 15 45 S 15 5.50 C S \* 1,3,4,5,6,9,r

367 1971 335 Taiga SS 1971 MAR 23 06:59:58 -RU-P 61.40000 56.20000 \* 2B -128 UG-S I 15 15 C 1,3,4,6,9,r

368 1971 335 Taiga SS 1971 MAR 23 06:59:58 -RU-P 61.40000 56.20000 \* 3B -128 UG-S I 15 15 C 1,3,4,6,9,r

369 1971 336 1971 APR 9 02:33:00.0 STS-D 49.83222 78.03861 A 148/1 632 A UG-T I 0.23 0.23 1,3,4,6,9,r

370 1971 337 1971 APR 25 03:32:59.9 STS-D 49.78028 78.03667 A 706 689 A UG-T WR 90 53 S 90 6.08 C A 1,3,4,5,6,8,9,r

371 1971 338 1971 MAY 25 04:03:00.4 STS-D 49.80417 78.14500 A 119 761 A UG-T WR 0.001 20 6 S 9 5.05 A 1,3,4,5,6,8,9,r

372 1971 339 1971 JUN 6 04:02:59.7 STS-SU 49.97542 77.66028 A 110 A UG-S WR 16 17 S 16 5.53 A 1,3,4,5,6,8,9,r

373 1971 340 1971 JUN 19 04:04:00.1 STS-SU 49.96903 77.64081 A 129 A UG-S WR 0.001 20 15 S 35 5.54 A 1,3,4,5,6,8,9,r

374 1971 341 1971 JUN 30 03:56:59.8 STS-B 49.94600 78.98047 A 1056 A UG-S WR 0.001 20 5 5 4.94 C A 1,3,4,5,6,9,r

375 1971 342 Globus-4 1971 JUL 2 17:00:01.1 -RU 67.28300 63.46700 GB-4 -540 UG-S I-SS 2.3 5.2 S 2.3 4.70 C A 1,3,4,5,9,r

376 1971 343 Globus-3 1971 JUL 10 17:00:01.4 -RU 64.16700 55.26700 GB-3 -470 UG-S I-SS 2.3 17 S 2.3 5.20 C A 1,3,4,5,9,r

377 1971 344 Globus-1 1971 SEP 19 11:00:01.1 -RU 57.50800 42.64300 GB-1 -610 UG-S I-SS 2.3 3.3 S 2.3 4.50 V A 1,3,4,5,9,r

378 1971 345 S 1971 SEP 27 05:59:55.75 NZ-NS 73.39300 54.92000 A-8 -1200 DMN UG-T WR 150 1500 2450 T\* 2450 6.67 V 15 CTN KB-11/A 1,3,4,5,8,9,r

379 1971 345 SS 1971 SEP 27 05:59:55.8 NZ-NS 73.39300 54.92000 A-8 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

380 1971 345 SS 1971 SEP 27 05:59:55.8 NZ-NS 73.39300 54.92000 A-8 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

381 1971 345 SS 1971 SEP 27 05:59:55.8 NZ-NS 73.39300 54.92000 A-8 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

382 1971 346 Globus-2 1971 OCT 4 10:00:00.1 -RU-A 61.35800 48.09200 GB-2 -595 UG-S I-SS 2.3 4.1 S 2.3 4.60 C A 1,3,4,5,9,r

383 1971 347 1971 OCT 9 06:02:59.7 STS-SU 49.97789 77.64144 A 111 A UG-S WR 12 12 S 12 5.37 V A 1,3,4,5,6,8,9,r

384 1971 348 1971 OCT 21 06:02:59.7 STS-SU 49.97381 77.59733 A 127 A UG-S WR 23 19 S 23 5.58 A 1,3,4,5,6,8,9,r

385 1971 349 Sapfir-1 1971 OCT 22 05:00:01.0 -RU-O 51.60000 54.45000 E-2 -1140 UG-S I-CV 15 17 S 15 5.20 C A 1,3,4,5,9,r

386 1971 350 S 1971 NOV 29 06:02:59.9 STS-D 49.73778 78.08139 A 105 766 A UG-T WR 0.001 20 16 S 28 5.46 C A 1,3,4,5,6,8,9,r

387 1971 350 SS 1971 NOV 29 06:02:59.9 STS-D 49.73778 78.08139 A 105 766 A UG-T WR 0.001 20 C 1,3,4,6,9,r

388 1971 351 1971 DEC 15 07:53:59.8 STS-D 49.83056 77.99333 A 157 -115 691 A UG-T WE 0.001 20 4.5 S 6 4.90 A 1,3,4,5,6,8,9,r

389 1971 352 Galit 1971 DEC 22 06:59:59.0 -KZ-BA 47.89700 48.13300 A-III -987 UG-S I 64 57 S 64 6.00 C A 1,3,4,5,9,r

390 1971 353 1971 DEC 30 06:21:00.2 STS-D 49.74917 78.00611 A 809 714 A UG-T WR 0.001 20 36 S 50 5.84 C A 1,3,4,5,6,8,9,r

391 1971 354 1971 DEC 30 06:21 STS-D 49.75500 78.04750 ?A 609 715 A UG-T WR 20 150 C 1,3,4,6,9,r

392 1972 355 1972 FEB 10 05:03:00.0 STS-B 50.02428 78.87808 A 1007 A UG-S WR 16 13 S 16 5.27 V A 1,3,4,5,6,9,r

393 1972 356 S 1972 MAR 10 04:56:59.8 STS-D 49.75194 78.11806 A 201 672 A UG-T WR 0.001 20 15 S 28 5.45 A 1,3,4,5,6,8,9,r

394 1972 356 SS 1972 MAR 10 04:56:59.8 STS-D 49.75194 78.11806 A 201 672 A UG-T WR 0.001 20 1,3,4,6,9,r

395 1972 357 S 1972 MAR 28 04:22:00.1 STS-D 49.73417 78.08250 A 191 655 A UG-T WR 0.001 20 6 T 6 5.18 C A 1,3,4,5,6,8,9,r

396 1972 357 SS 1972 MAR 28 04:22:00.1 STS-D 49.73417 78.08250 A 191 655 A UG-T PR 0.001 20 C 1,3,4,6,9,r

397 1972 357 SS 1972 MAR 28 04:22:00.1 STS-D 49.73417 78.08250 A 191 655 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

398 1972 358 Crater 1972 APR 11 06:00:01.9 -TU 37.35000 62.05000 ? -1720 UG-S I-FE 15 8.4 S 15 4.90 C A 1,3,4,5,9,r

399 1972 359 1972 APR 20 STS-D 49.84167 78.10722 A 505P 587 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

400 1972 360 1972 JUN 7 01:28 STS-D 49.83167 78.10944 ?A 110 618 A UG-T WR 0.001 20 C 1,3,4,6,9,r

401 1972 361 1972 JUN 7 01:28:00.0 STS-D 49.77306 77.99000 A 601 620 A UG-T WE 0.001 20 14 S 25 5.42 C A 1,3,4,5,6,8,9,r

402 1972 362 1972 JUL 6 01:03:00.0 STS-D 49.73611 78.10917 A 157-M 650 A UG-T WE 0.001 20 1.5 S 1.5 4.40 C A 1,3,4,5,6,9,r

403 1972 363 Fakel 1972 JUL 9 07:00:01.3 -UK 49.80000 35.40000 ? -2483 UG-S I-FE 3.8 38 3.8 4.80 C A 1,3,4,5,9,r

404 1972 364 1972 JUL 27 10:00 NZ-SS 70.80000 53.80000 \* Yu-3 UG-S FS 0.001 20 10 C Ch-70 1,3,4,9,r

405 1972 365 1972 AUG 16 03:16:59.8 STS-D 49.77056 78.05722 A 708 555 A UG-T WE 8 7.8 S 8 5.11 A 1,3,4,5,6,8,9,r

406 1972 366 Region-3 1972 AUG 20 03:00:00.0 -KZ 49.40000 48.14200 R-3 -490 UG-S I-SS 6.6 55 S 6.6 5.70 C A 1,3,4,5,9,r

407 1972 367 1972 AUG 26 03:46:59.7 STS-SU 49.98197 77.71661 A 132 A UG-S WR 0.001 20 13 S 21 5.36 A 1,3,4,5,6,8,9,r

408 1972 368 S 1972 AUG 28 05:59:56.87 NZ-NS 73.38800 54.84700 A-16 -900 D UG-T WR 150 1500 1130 T\* 1120 6.49 V 1 MCi Ch-70 A 1,3,4,5,8,9,r

409 1972 368 SS 1972 AUG 28 05:59:56.9 NZ-NS 73.38800 54.84700 A-16 UG-T WR 20 150 Ch-70 1,3,4,9,r

410 1972 368 SS 1972 AUG 28 05:59:56.9 NZ-NS 73.38800 54.84700 A-16 UG-T WR 150 1500 Ch-70 1,3,4,9,r

411 1972 368 SS 1972 AUG 28 05:59:56.9 NZ-NS 73.38800 54.84700 A-16 UG-T WR 150 1500 Ch-70 1,3,4,9,r

412 1972 369 1972 SEP 2 08:56:59.9 STS-SU 49.95942 77.64089 A 128 A UG-S WR 2 4.3 S 2 5.10 A 1,3,4,5,6,9,r

413 1972 370 Dnepr-1 1972 SEP 4 07:00:00.0 -RU-M 67.75000 33.10000 ? -130 UG-T I 2.1 4.1 S 2.1 4.60 C A \* 1,3,4,5,9,r

414 1972 371 Region-1 1972 SEP 21 09:00:00.3 -RU-O 52.11800 52.06800 R-1 -490 UG-S I-SS 2.3 10 S 2.3 5.00 C A 1,3,4,5,9,r

415 1972 372 Region-4 1972 OCT 3 09:00:00.2 -RU 46.85300 44.93800 R-4 -490 UG-S I-SS 6.6 44 S 6.6 5.60 C A 1,3,4,5,9,r

416 1972 373 1972 NOV 2 01:27:00.2 STS-B 49.92697 78.81725 A 1061 A UG-S WR 165 100 S 165 6.16 A 1,3,4,5,6,9,r

417 1972 374 Region-2 1972 NOV 24 09:00:00.0 -RU-O 51.99000 51.86700 R-2 -680 UG-S I-SS 2.3 3.3 S 2.3 4.50 C A 1,3,4,5,9,r

418 1972 375 Region-5 1972 NOV 24 10:00:00.2 -KZ 51.84200 64.21000 R-5 -425 UG-S I-SS 6.6 17 S 6.6 5.20 C A 1,3,4,5,9,r

419 1972 376 S 1972 DEC 10 04:27:00.0 STS-D 49.82611 78.09194 A 3-2 660 A UG-T WR 0.001 20 23 S 58 5.72 C A 1,3,4,5,6,8,9,r

420 1972 376 SS 1972 DEC 10 04:27:00 STS-D 49.82806 78.05806 A 140 646 A UG-T WR 20 150 C 1,3,4,6,9,r

421 1972 377 1972 DEC 10 04:27:10.0 STS-B 50.02700 78.99556 A 1204 -378 A UG-S PR 140 150 140 5.96 110 V A 1,3,4,5,6,9,r

422 1972 378 1972 DEC 28 04:27:00.0 STS-D 49.73611 78.10722 A 25PP 739 A UG-T WR 0.001 20 0.39 S 4.60 A 1,3,4,5,6,8,9,r

423 1973 379 1973 FEB 16 05:03:00.0 STS-D 49.81583 78.10667 A 113 768 A UG-T WR 20 150 17 S 42 5.60 A 1,3,4,5,6,9,r

424 1973 380 1973 APR 19 04:32:59.92 STS-SU 49.98400 77.61400 131 UG-S WR 0.001 20 12 S 21 5.36 A 1,3,4,5,6,8,9,r

425 1973 381 S 1973 JUL 10 01:27:00.15 STS-D 49.79111 78.01278 A 806 684 A UG-T WR 0.001 20 11 S 20 5.34 C A 1,3,4,5,6,8,9,r

426 1973 381 SS 1973 JUL 10 01:27:00.2 STS-D 49.79111 78.01278 A 806 684 A UG-T WR 0.001 20 C 1,3,4,6,9,r

427 1973 381 SS 1973 JUL 10 01:27:00.2 STS-D 49.79111 78.01278 A 806 684 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

428 1973 382 1973 JUL 23 01:23:00.16 STS-B 49.96889 78.81750 A 1066 -465 A UG-S PR 150 1500 212 212 6.17 300 V A 1,3,4,5,6,8,9,r

429 1973 383 Meridian-3 1973 AUG 15 02:00:00.0 -KZ 42.77500 67.40800 MN-3 -610 UG-S I-SS 6.3 21 S 6.3 5.30 C A 1,3,4,5,9,r

430 1973 384 Meridian-1 1973 AUG 28 03:00:00.0 -KZ 50.52700 68.32300 MN-1 -400 UG-S I-SS 6.3 17 S 6.3 5.20 C A 1,3,4,5,9,r

431 1973 385 S 1973 SEP 12 06:59:54.81 NZ-NS 73.31400 55.05600 V-1 -1500 D UG-T WR 1500 10000 4000 T> 3800 6.97 V 15 CTN KB-11/A 1,3,4,5,8,9,r

432 1973 385 SS 1973 SEP 12 06:59:54.8 NZ-NS 73.31400 55.05600 V-1 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

433 1973 385 SS 1973 SEP 12 06:59:54.8 NZ-NS 73.31400 55.05600 V-1 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

434 1973 385 SS 1973 SEP 12 06:59:54.8 NZ-NS 73.31400 55.05600 V-1 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

435 1973 386 Meridian-2 1973 SEP 19 03:00:00.2 -KZ 45.75800 67.82500 MN-2 -400 UG-S I-SS 6.3 13 S 6.3 5.10 C A 1,3,4,5,9,r

436 1973 387 1973 SEP 20 STS-B 49.96167 78.85556 A 1267 A UG-S WR 0 0.001 0.001 C 1,3,4,6,9,r

437 1973 388 1973 SEP 27 07:00:01.12 NZ-SS 70.73100 53.83600 Yu-4 -880 \*\* UG-S FS 20 150150/100 180 5.89 V 10 Ci Ch-70 A 1,3,4,5,8,9,r

438 1973 389 Sapfir-2 1973 SEP 30 05:00:00.4 -RU-O 51.65000 54.55000 E-3 -1145 UG-S I-CV 10 17 S 10 5.20 C A 1,3,4,5,9,r

439 1973 391 1973 OCT 26 04:27:00.14 STS-D 49.75222 78.13250 A 205 575 A UG-T WE 0.001 20 6.6 S 15 5.23 A 1,3,4,5,6,8,9,r

440 1973 390 Kama-2 1973 OCT 26 05:59:59.5 -RU-BK 53.65000 55.40000 ? -2030 UG-S I-CV 10 10 S 10 4.80 C A \* 1,3,4,5,9,r

441 1973 392 1973 OCT 27 07:00:00.61 NZ-SS 70.78000 54.03500 Yu-1 -1900 D UG-S WR 1500 10000 4000 4000 6.98 C TN KB-11 A 1,3,4,5,8,9,r

442 1973 393 1973 NOV 4 03:57:00.0 STS-B 50.06306 78.93306 A 1069 A UG-S WR 0.001 20 V 1,3,4,6,9,r

443 1973 394 1973 DEC 14 07:46:59.67 STS-B 50.04381 78.98569 A 1064 A UG-S WR 20 150 80 80 6.00 A 1,3,4,5,6,8,9,r

444 1973 395 1973 DEC 31 04:03:00.0 STS-D 49.73944 78.08639 A 21P -157 676 A UG-T WR 0.001 20 0.5 0.5 C 1,3,4,6,9,r

445 1974 396 S 1974 JAN 30 04:57:04.6 STS-D 49.82333 78.04167 A 603 677 A UG-T WE 0.001 20 14 S 24 5.40 C A 1,3,4,5,6,9,r

446 1974 396 SS 1974 JAN 30 04:57:04.6 STS-D 49.82333 78.04167 A 603 677 A UG-T WE 0.001 20 4.5 S 6 4.90 C A 1,3,4,5,6,9,r

447 1974 396 SS 1974 JAN 30 04:57:04.6 STS-D 49.82333 78.04167 A 603 677 A UG-T WE 0.001 20 C 1,3,4,6,9,r

448 1974 397 1974 FEB 28 STS-D 49.83167 78.10944 A 110P 618 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

449 1974 398 1974 APR 16 05:52:59.84 STS-B 50.02444 78.92639 A 1301 A UG-S WR 0.001 20 1 1 4.90 V A 1,3,4,5,6,8,9,r

450 1974 399 1974 MAY 16 03:03:00.1 STS-D 49.73972 78.03583 A 176 652 A UG-T WR 0.001 20 10 S 18 5.30 C A 1,3,4,5,6,9,r

451 1974 400 1974 MAY 31 03:27:00.02 STS-B 49.96056 78.84417 A 1207 -316 A UG-S PR 20 150 71 71 5.90 200 V A 1,3,4,5,6,8,9,r

452 1974 401 1974 JUN 25 03:57:00.2 STS-D 49.83056 78.10139 A 3-1PP 630 A UG-T WE 0.001 20 1.8 S 3.5 4.70 C A 1,3,4,5,6,9,r

453 1974 402 Kama-1 1974 JUL 8 06:00:00.0 -RU-BK 53.70000 55.10000 ? -2130 UG-S I-CV 10 4.1 S 10 4.60 C A \* 1,3,4,5,9,r

454 1974 403 1974 JUL 10 02:57:00.0 STS-D 49.77722 78.11250 A 195 600 A UG-T WR 0.001 20 8.4 S 18 5.30 C A 1,3,4,5,6,9,r

455 1974 404 1974 JUL 29 03:28:00.0 STS-B 49.93750 78.93583 A 1050 A UG-S WR 0.001 20 1,3,4,6,9,r

456 1974 405 Gorizont-2 1974 AUG 14 15:00:00.2 -RU-T 68.90300 75.82300 G-2 -550 UG-S I-SS 7.6 27 S 7.6 5.40 C A 1,3,4,5,9,r

457 1974 407 S 1974 AUG 29 09:59:56.2 NZ-NS 73.39700 54.90500 A-11 -1000 DMX UG-T WR 150 1500 570 S> 1200 6.58 V 4.9 kCi KB-11/A 1,3,4,5,9,f,r

458 1974 407 SS 1974 AUG 29 09:59:56.2 NZ-NS 73.39700 54.90500 A-11 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

459 1974 407 SS 1974 AUG 29 09:59:56.2 NZ-NS 73.39700 54.90500 A-11 UG-T WR 20 150 KB-11/Ch-71,3,4,9,r

460 1974 407 SS 1974 AUG 29 09:59:56.2 NZ-NS 73.39700 54.90500 A-11 UG-T WR 0.001 20 KB-11/Ch-71,3,4,9,r

461 1974 407 SS 1974 AUG 29 09:59:56.2 NZ-NS 73.39700 54.90500 A-11 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

462 1974 406 Gorizont-1 1974 AUG 29 15:00:00.4 -RU 67.08500 62.62500 G-1 -590 UG-S I-SS 7.6 10 S 7.6 5.00 C A 1,3,4,5,9,r

463 1974 408 1974 SEP 13 03:03:00.0 STS-D 49.76972 78.05528 A 179 690 A UG-T WE 0.001 20 8.6 S 14 5.20 C A 1,3,4,5,6,9,r

464 1974 409 Kristall 1974 OCT 2 01:00:01.1 -RU 66.10000 112.65000 ? -98 305 \* UG-S I-EM 1.7 1.7 4.60 60 \* 1,3,4,9,r

465 1974 410 Argon-3 1974 OCT 16 06:33:00.14 STS-B 49.98750 78.89417 A 1005 A UG-S WE 0.001 20 19 19 5.50 C A 1,3,4,5,6,8,9,r

466 1974 411 1974 NOV 2 05:00:00.0 NZ-SS 70.81000 53.91000 Yu-5N -1500 D UG-S WR 1500 10000 2000 2300 6.81 C TN Ch-70 A 1,3,4,5,8,9,r

467 1974 412 1974 NOV 28 05:57:00.0 STS-SU 49.95000 77.70000 \* 215 UG-S WR 0.001 20 0.01 2.70 V 1,3,4,6,9,r

468 1974 413 Lazurit 1974 DEC 7 05:59:59.0 STS-M 49.91600 77.60500 R-1 -75 UG-S I-EM 1.7 1.8 S 1.7 4.70 A \* 1,3,4,5,6,9,r

469 1974 414 1974 DEC 16 06:23:00.14 STS-D 49.76778 78.08167 A 709P 629 A UG-T WR 0.001 20 5.7 S 6.7 4.94 A 1,3,4,5,6,8,9,r

470 1974 415 1974 DEC 16 06:41:00.34 STS-D 49.83306 78.02667 A 148/5 -126 600 A UG-T I 3.8 3.6 S 3.8 4.89 C A 1,3,4,5,6,8,9,r

471 1974 416 1974 DEC 27 05:46:59.49 STS-B 49.96583 79.00333 A 1058 A UG-S WR 20 150 36 36 5.50 C A 1,3,4,5,6,8,9,r

472 1975 417 S 1975 FEB 20 05:33:00.0 STS-D 49.77750 78.01556 A 163 749 A UG-T WE 0.001 20 C 1,3,4,6,9,r

473 1975 417 SS 1975 FEB 20 05:33:00.0 STS-D 49.77750 78.01556 A 163 749 A UG-T WE 0.001 20 C 1,3,4,6,9,r

474 1975 417 SS 1975 FEB 20 05:33:00.0 STS-D 49.77750 78.01556 A 163 749 A UG-T WE 0.001 20 C 1,3,4,6,9,r

475 1975 418 1975 FEB 20 05:33 STS-D 49.79889 78.00139 ?A 156 665 A UG-T WE 0.001 20 26 S 55 5.70 C A 1,3,4,5,6,9,r

476 1975 419 1975 MAR 11 05:43:00.1 STS-D 49.75472 78.10750 A 101 650 A UG-T WR 0.001 20 14 S 24 5.40 C A 1,3,4,5,6,9,r

477 1975 420 1975 APR 25 05:00:00.0 -KZ-BA 47.90900 47.91200 A-II-2 -600 UG-CS I 0.35 2.6 S 0.35 4.70 C A \* 1,3,4,5,9,r

478 1975 421 1975 APR 27 05:36:59.78 STS-B 49.93750 78.90361 A 1205 A UG-S WR 20 150 29 29 5.60 C A 1,3,4,5,6,8,9,r

479 1975 422 1975 JUN 8 03:27:00.0 STS-D 49.75167 78.00583 A 165 722 A UG-T PR 0.001 20 18 S 32 5.50 C A 1,3,4,5,6,9,r

480 1975 423 1975 JUN 30 03:27:00.25 STS-B 49.98556 78.89694 A A A UG-S WR 0.001 20 2 8 5.00 A 1,3,4,5,6,8,9,r

481 1975 424 S 1975 JUL 15 02:57:00.0 STS-D 49.79139 78.09444 A 133 686 A UG-T WR 0.001 20 C 1,3,4,6,9,r

482 1975 424 SS 1975 JUL 15 02:57:00.0 STS-D 49.79139 78.09444 A 133 686 A UG-T WR 0.001 20 C 1,3,4,6,9,r

483 1975 425 S 1975 AUG 7 03:57:00.1 STS-D 49.80194 78.13056 A 122 711 A UG-T WR 0.001 20 8.2 S 14 5.20 C A 1,3,4,5,6,9,r

484 1975 425 SS 1975 AUG 7 03:57:00 STS-D 49.80139 78.12833 A 123 752 A UG-T WR 0.001 20 C 1,3,4,6,9,r

485 1975 426 Gorizont-4 1975 AUG 12 15:00:00.6 -RU 70.76300 126.95300 G-4 -500 UG-S I-SS 7.6 7.6 5.10 C 1,3,4,9,r

486 1975 427 S 1975 AUG 23 08:59:58.25 NZ-NS 73.33400 54.68200 A-10 -700 DMX UG-T WE 150 1500 460 S> 1100 6.55 KB-11 A 1,3,4,5,9,f,r

487 1975 427 SS 1975 AUG 23 08:59:58.3 NZ-NS 73.33400 54.68200 A-10 UG-T WE 0.001 20 KB-11 1,3,4,9,r

488 1975 427 SS 1975 AUG 23 08:59:58.3 NZ-NS 73.33400 54.68200 A-10 UG-T WE 150 1500 KB-11 1,3,4,9,r

489 1975 427 SS 1975 AUG 23 08:59:58.3 NZ-NS 73.33400 54.68200 A-10 UG-T WE 0.001 20 KB-11 1,3,4,9,r

490 1975 427 SS 1975 AUG 23 08:59:58.3 NZ-NS 73.33400 54.68200 A-10 UG-T WR 20 150 KB-11 1,3,4,9,r

491 1975 427 SS 1975 AUG 23 08:59:58.3 NZ-NS 73.33400 54.68200 A-10 UG-T WR 150 1500 KB-11 1,3,4,9,r

492 1975 427 SS 1975 AUG 23 08:59:58.3 NZ-NS 73.33400 54.68200 A-10 UG-T WR 150 1500 KB-11 1,3,4,9,r

493 1975 427 SS 1975 AUG 23 08:59:58.3 NZ-NS 73.33400 54.68200 A-10 UG-T WR 20 150 KB-11 1,3,4,9,r

494 1975 428 Gorizont-3 1975 SEP 29 11:00:00.4 -RU-K 69.57800 90.33700 G-3 -830 UG-S I-SS 7.6 6.6 S 7.6 4.80 C A 1,3,4,5,9,r

495 1975 429 1975 OCT 5 04:27:00.0 STS-D 49.78306 78.08667 A 192 635 A UG-T WR 0.001 20 0.19 S 0.2 A 1,3,4,5,6,9,r

496 1975 430 S 1975 OCT 18 09:00 NZ-SS 70.81600 53.74400 Yu-6N -1100 D UG-S WR 150 1500 500 S> 600 V Ch-70 A 1,3,4,5,9,f,r

497 1975 430 SS 1975 OCT 18 09:00 NZ-SS 70.81600 53.74400 Yu-6N UG-S WR 150 1500 500 S> 600 Ch-70 A 1,3,4,5,9,f,r

498 1975 431 1975 OCT 18 08:59:59.4 NZ-SS 70.81600 53.75300 Yu-7 UG-S WR 150 1500 500 S> 600 6.75 C Ch-70 A 1,3,4,5,8,9,r

499 1975 432 S 1975 OCT 21 11:59:58.03 NZ-NS 73.30700 55.01000 A-12 -700 DMX UG-T WR 150 1500 500 S> 1300 6.60 V 300 kCi KB-11/A 1,3,4,5,8,9,f,r

500 1975 432 SS 1975 OCT 21 11:59:58.0 NZ-NS 73.30700 55.01000 A-12 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

501 1975 432 SS 1975 OCT 21 11:59:58.0 NZ-NS 73.30700 55.01000 A-12 UG-T WR 20 150 KB-11/Ch-71,3,4,9,r

502 1975 432 SS 1975 OCT 21 11:59:58.0 NZ-NS 73.30700 55.01000 A-12 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

503 1975 432 SS 1975 OCT 21 11:59:58.0 NZ-NS 73.30700 55.01000 A-12 UG-T WR 150 1500 KB-11/Ch-71,3,4,9,r

504 1975 433 1975 OCT 29 04:46:59.89 STS-B 49.95389 78.87389 A 1206 A UG-S WR 20 150 36 36 5.61 A 1,3,4,5,6,8,9,r

505 1975 434 1975 DEC 13 04:56:59.99 STS-D 49.81333 78.10861 A 604 770 A UG-T WR 0.001 20 6 S 8 5.00 C A 1,3,4,5,6,8,9,r

506 1975 435 1975 DEC 25 05:16:59.67 STS-B 50.04389 78.82000 A 1067 A UG-S WR 20 150 59 59 5.69 C A 1,3,4,5,6,8,9,r

507 1976 436 1976 JAN 15 04:46:59.97 STS-D 49.81000 78.17139 A 115 602 A UG-T WR 0.001 20 10 S 13 5.18 C A 1,3,4,5,6,8,9,r

508 1976 437 1976 MAR 17 02:57:00.0 STS-D 49.75556 78.09917 A 608P 642 A UG-T WR 0.001 20 V 1,3,4,6,9,r

509 1976 438 1976 MAR 29 07:00:00.2 -KZ-BA 47.89700 48.13300 A-III-2 -990 UG-CS I 10 10 4.30 C \* 1,3,4,9,r

510 1976 439 1976 APR 10 05:03:00.0 STS-D 49.75500 78.04750 A 609P -130 715 A UG-T WR 0.001 20 0.1 0.1 C V \* 1,3,4,6,9,r

511 1976 441 1976 APR 21 04:58:00.16 STS-D 49.75472 78.10750 A 101P 650 A UG-T WR 0.001 20 7.3 S 7 4.94 C A 1,3,4,5,6,8,9,r

512 1976 440 1976 APR 21 05:02:59.70 STS-B 49.90056 78.83083 A 1201 A UG-S WR 0.001 20 7 7 5.12 C A 1,3,4,5,6,8,9,r

513 1976 442 1976 MAY 19 02:57:00.2 STS-D 49.77750 78.01556 A 163P 749 A UG-T WR 0.001 20 3.7 S 3.7 4.72 C A 1,3,4,5,6,8,9,r

514 1976 443 1976 JUN 9 03:02:59.79 STS-B 49.99361 79.02444 A 1075 A UG-S WR 0.001 20 10 10 5.07 C A 1,3,4,5,6,8,9,r

515 1976 444 1976 JUL 4 02:56:59.99 STS-B 49.90417 78.89944 A 1062 A UG-S WR 20 150 65 65 5.85 C A 1,3,4,5,6,8,9,r

516 1976 445 1976 JUL 23 02:33:00.19 STS-D 49.74333 78.05167 A 185 394 A UG-T WR 0.001 20 6.3 S 7 4.96 C A 1,3,4,5,6,8,9,r

517 1976 446 1976 JUL 29 05:00:00.5 -KZ-BA 47.87000 48.15000 A-IV -1000 UG-S I-CV 58 45 S 58 5.90 C A 1,3,4,5,9,r

518 1976 447 1976 AUG 4 02:57:00.0 STS-SU? 49.87000 77.70000 133 UG-S WR 0.001 20 0.06 S 0.9 4.20 A 1,3,4,5,6,8,9,r

519 1976 448 1976 AUG 28 02:57:00.04 STS-B 49.97500 78.92639 A 1202 A UG-S WR 20 150 53 53 5.74 C A 1,3,4,5,6,8,9,r

520 1976 449 S 1976 SEP 29 02:59:57.7 NZ-NS 73.36000 54.87100 A-14 -400 D UG-T WR 20 150 70 S 44 130 5.83 V 10 Ci KB-11 A 1,3,4,5,8,9,r

521 1976 449 SS 1976 SEP 29 02:59:57.7 NZ-NS 73.36000 54.87100 A-14 UG-T WR 20 150 KB-11 1,3,4,9,r

522 1976 450 S 1976 OCT 20 07:59:58.07 NZ-NS 73.39800 54.81200 A-15 -300 DMX UG-T WR 0.001 20 13 S 13 5.10 C KB-11 A 1,3,4,5,8,9,r

523 1976 450 SS 1976 OCT 20 07:59:58.1 NZ-NS 73.39800 54.81200 A-15 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

524 1976 450 SS 1976 OCT 20 07:59:58.1 NZ-NS 73.39800 54.81200 A-15 UG-T FS 0.001 20 C KB-11 1,3,4,9,r

525 1976 450 SS 1976 OCT 20 07:59:58.1 NZ-NS 73.39800 54.81200 A-15 UG-T SE 0 0.001 0.001 C KB-11 1,3,4,9,r

526 1976 451 1976 OCT 30 04:57:00.21 STS-D 49.83139 78.05722 A 143 625 A UG-T WE 0.001 20 4.5 S 2.8 4.62 C A 1,3,4,5,6,8,9,r

527 1976 452 Oka 1976 NOV 5 04:00:00.0 -RU-YK 61.45800 112.86000 42 -1525 UG-S I-OS 15 21 S 15 5.30 C A 1,3,4,5,9,r

528 1976 453 1976 NOV 23 05:02:59.84 STS-B 50.01306 78.94333 A 1207bis A UG-S WR 20 150 74 74 5.79 C A 1,3,4,5,6,8,9,r

529 1976 454 S 1976 DEC 7 04:56:59.98 STS-B 49.94389 78.83917 A 1304 A UG-S WR 20 150 54 T 54 5.80 A 1,3,4,5,6,9,r

530 1976 454 SS 1976 DEC 7 04:57:00.0 STS-B 49.94389 78.83917 A 1304 A UG-S WR 0.001 20 1,3,4,6,9,r

531 1976 455 1976 DEC 7 04:57 STS-B 49.89917 78.78639 ?A 1209 A UG-S WR 0.001 20 95 5.90 1,3,4,6,9,r

532 1976 456 S 1976 DEC 30 03:57:00.31 STS-D 49.78028 78.03667 A 706P 689 A UG-T WR 0.001 20 7.8 S 10 5.09 C A 1,3,4,5,6,8,9,r

533 1976 456 SS 1976 DEC 30 03:57:00.3 STS-D 49.78028 78.03667 A 706P 689 A UG-T WR 0.001 20 C 1,3,4,6,9,r

534 1977 458 1977 MAR 29 03:56:58 STS-D? 49.97000 78.08600 S 130 UG-S WR 20 150 14 S 24 5.40 A 1,3,4,5,6,9,r

535 1977 457 S 1977 MAR 29 03:56:59.95 STS-D 49.77639 78.01750 A 707 735 A UG-T WR 0.001 20 25 5.41 C 1,3,4,6,8,9,10,

536 1977 457 SS 1977 MAR 29 03:57:00.0 STS-D 49.77639 78.01750 A 707 735 A UG-T WR 0.001 20 C 1,3,4,6,9,r

537 1977 457 SS 1977 MAR 29 03:57:00.0 STS-D 49.77639 78.01750 A 707 735 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

538 1977 459 1977 APR 25 04:07:00.16 STS-D 49.81333 78.10861 A 604P 770 A UG-T WR 0.001 20 6.6 S 10 5.07 C A 1,3,4,5,6,8,9,r

539 1977 460 1977 MAY 29 02:57:00.13 STS-B 49.94639 78.77167 A 1400 A UG-S WR 20 150 44 44 5.75 A 1,3,4,5,6,8,9,r

540 1977 461 1977 JUN 29 03:07:00.24 STS-B 49.99944 78.86667 A 1080 A UG-S WR 0.001 20 9 9 5.20 A 1,3,4,5,6,8,9,r

541 1977 462 Meteorit-2 1977 JUL 26 17:00:00.2 -RU-K 69.57500 90.37500 M2 -880 UG-S I-SS 15 10 S 15 5.00 C A 1,3,4,5,9,r

542 1977 463 S 1977 JUL 30 01:57:00.11 STS-D 49.75056 78.04917 A 175 682 A UG-T WR 0.001 20 7.1 S 11 5.13 C A 1,3,4,5,6,8,9,r

543 1977 463 SS 1977 JUL 30 01:57:00.1 STS-D 49.75056 78.04917 A 175 682 A UG-T WR 0.001 20 C 1,3,4,6,9,r

544 1977 464 Meteorit-5 1977 AUG 10 22:00:00.1 -RU 50.95500 110.98300 M5 -490 UG-S I-SS 8.5 10 S 8.5 5.00 C A 1,3,4,5,9,r

545 1977 465 1977 AUG 17 04:26:59.97 STS-D 49.83083 78.11389 A 111 640 A UG-T WR 0.001 20 5.6 S 8 5.01 C A 1,3,4,5,6,8,9,r

546 1977 466 Meteorit-3 1977 AUG 20 22:00:00.8 -RU-K 64.10800 99.55800 M3 -600 UG-S I-SS 8.5 10 S 8.5 5.00 C A 1,3,4,5,9,r

547 1977 467 S 1977 SEP 1 02:59:57.97 NZ-NS 73.33900 54.61900 A-17 -600 DMX UG-T WR 0.001 20 55 S 120 5.71 C KB-11/A 1,3,4,5,8,9,r

548 1977 467 SS 1977 SEP 1 02:59:58.0 NZ-NS 73.33900 54.61900 A-17 UG-T WR 0.001 20 C KB-11/Ch-71,3,4,9,r

549 1977 467 SS 1977 SEP 1 02:59:58.0 NZ-NS 73.33900 54.61900 A-17 UG-T WR 0.001 20 C KB-11/Ch-71,3,4,9,r

550 1977 467 SS 1977 SEP 1 02:59:58.0 NZ-NS 73.33900 54.61900 A-17 UG-T WR 20 150 \*\*70-130? C KB-11/Ch-71,3,4,9,r

551 1977 468 S 1977 SEP 5 03:02:59.96 STS-B 50.05556 78.91417 A 1079 A UG-S WR 20 150 78 T 78 5.73 A 1,3,4,5,6,7,8,9

552 1977 468 SS 1977 SEP 5 03:03:00.0 STS-B 50.05556 78.91417 A 1079 A UG-S FS 0.001 20 1,3,4,7,9,r

553 1977 469 Meteorit-4 1977 SEP 10 16:00:00.2 -RU 57.25100 106.55100 M4 -540 UG-S I 7.6 6.6 S 7.6 4.80 C A 1,3,4,5,9,r

554 1977 470 Galit 1977 SEP 30 06:59:58.4 -KZ-BA 47.89700 48.16100 A-V -1500 UG-S I 10 5.4 S 10 5.00 C A 1,3,4,5,9,r

555 1977 471 1977 OCT 9 10:59:58.12 NZ-NS 73.40900 54.92700 A-7P -160 D UG-T WR 0.001 20 4.1 S 5 4.60 V 3 kCi KB-11 A 1,3,4,5,8,9,r

556 1977 472 1977 OCT 14 06:59:59.1 -KZ-BA 47.90900 47.91200 A-II-3 -600 UG-CS I 0.1 0.1 C \* 1,3,4,9,r

557 1977 473 S 1977 OCT 29 03:06:59.97 STS-D 49.83417 78.08028 A 136 638 A UG-T WR 0.001 20 23 S 42 5.60 C A 1,3,4,5,6,8,9,r

558 1977 473 SS 1977 OCT 29 03:07:00.0 STS-D 49.83417 78.08028 A 136 638 A UG-T FS 0.001 20 C 1,3,4,6,9,r

559 1977 474 1977 OCT 29 03:07:04.92 STS-B 50.05222 78.98028 A 1214 A UG-S WR 20 150 50 50 5.56 A 1,3,4,5,6,8,9,r

560 1977 475 1977 OCT 30 06:59:59.1 -KZ-BA 47.90900 47.91200 A-II-4 -600 UG-CS I 0.01 0.1 \*\* 0.1 C \* 1,3,4,9,r

561 1977 476 1977 NOV 12 05:11:00.0 STS-B 50.05222 78.86444 A 1073 A UG-S WR 0.001 20 C 1,3,4,6,9,r

562 1977 477 1977 NOV 27 03:57:00.0 STS-D 49.75444 78.05028 A 18P 537 A UG-T WR 0.001 20 1,3,4,6,9,r

563 1977 478 S 1977 NOV 30 04:06:59.94 STS-B 49.96722 78.87444 A Glubokaya A UG-S WR 20 150 70 70 5.89 A 1,3,4,5,6,7,8,9

564 1977 478 SS 1977 NOV 30 04:06:59.9 STS-B 49.96722 78.87444 A Glubokaya A UG-S WR 0.001 20 1,3,4,6,7,9,r

565 1977 479 1977 DEC 26 04:03 STS-D 49.81083 78.05417 ?A 803 722 A UG-T WR 0.001 20 C 1,3,4,6,9,r

566 1977 480 S 1977 DEC 26 04:03:00.24 STS-D 49.80139 78.12833 A 123P 752 A UG-T WR 0.001 20 4.3 S 6 4.91 C A 1,3,4,5,6,8,9,r

567 1977 480 SS 1977 DEC 26 04:03:00 STS-D 49.80194 78.13056 A 122P 711 A UG-T WR 0 0.001 0.001 C 1,3,4,6,9,r

568 1977 480 SS 1977 DEC 26 04:03:00 STS-D 49.80194 78.13056 A 122P 711 A UG-T WR 0.001 20 C 1,3,4,6,9,r

569 1977 480 SS 1977 DEC 26 04:03:00 STS-D 49.80194 78.13056 A 122P 711 A UG-T WR 0.001 20 C 1,3,4,6,9,r

570 1978 481 1978 MAR 19 03:46:59.82 STS-SU 49.94500 77.70400 2691 UG-S WR 0.001 20 9.4 S 13 5.19 C A 1,3,4,5,6,8,9,r

571 1978 482 S 1978 MAR 26 03:56:59.96 STS-D 49.76194 77.98250 A 701 -260 704 A UG-T WR 0.001 20 30 T 30 5.69 C A 1,3,4,5,6,8,9,r

572 1978 482 SS 1978 MAR 26 03:57:00.0 STS-D 49.76194 77.98250 A 701 704 A UG-T WR 0.001 20 C 1,3,4,6,9,r

573 1978 483 S 1978 APR 22 03:07:00.01 STS-D 49.75167 78.13167 A 204 579 A UG-T WR 0.001 20 11 S 20 5.35 C A 1,3,4,5,6,8,9,r

574 1978 483 SS 1978 APR 22 03:07:00.0 STS-D 49.75167 78.13167 A 204 579 A UG-T WR 0.001 20 C 1,3,4,6,9,r

575 1978 483 SS 1978 APR 22 03:07:00.0 STS-D 49.75167 78.13167 A 204 579 A UG-T WR 0.001 20 C 1,3,4,6,9,r

576 1978 484 1978 MAY 24 03:07:00 STS-D 49.74333 78.05167 A 185P 394 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

577 1978 485 1978 MAY 29 04:56:59.85 STS-D 49.79139 78.09444 A 133P 686 A UG-T WE 0.001 20 2.6 S 3 4.68 C A 1,3,4,5,6,8,9,r

578 1978 486 1978 JUN 2 STS-D 49.74333 78.05167 A 185PP 394 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

579 1978 487 1978 JUN 11 02:57:00.14 STS-B 49.91333 78.80194 A 1010 A UG-S WR 20 150 58 58 5.83 A \* 1,3,4,5,6,7,8,9

580 1978 488 1978 JUL 5 02:47:00.05 STS-B 49.90000 78.86667 A 1077 A UG-S WR 20 150 57 87 5.77 A \* 1,3,4,5,6,7,8,9

581 1978 489 S 1978 JUL 28 02:46:59.89 STS-D 49.75500 78.14500 A 104 623 A UG-T WR 20 150 27 S 60 5.75 A 1,3,4,5,6,8,9,r

582 1978 489 SS 1978 JUL 28 02:46:59.9 STS-D 49.75500 78.14500 A 104 623 A UG-T WR 0.001 20 1,3,4,6,9,r

583 1978 489 SS 1978 JUL 28 02:46:59.9 STS-D 49.75500 78.14500 A 104 623 A UG-T WR 0.001 20 1,3,4,6,9,r

584 1978 489 SS 1978 JUL 28 02:46:59.9 STS-D 49.75500 78.14500 A 104 623 A UG-T WR 0.001 20 1,3,4,6,9,r

585 1978 489 SS 1978 JUL 28 02:46:59.9 STS-D 49.75500 78.14500 A 104 623 A UG-T WR 0.001 20 1,3,4,6,9,r

586 1978 490 Kraton-4 1978 AUG 9 18:00:00.8 -RU 63.67800 125.52200 KR-4 -560 UG-S I-SS 22 44 S 22 5.60 C A 1,3,4,5,9,r

587 1978 491 S 1978 AUG 10 07:59:57.93 NZ-NS 73.29100 54.88300 A-18 UG-T WR 0.001 20 89 S 180 6.04 KB-11 A 1,3,4,5,8,9,r

588 1978 491 SS 1978 AUG 10 07:59:57.9 NZ-NS 73.29100 54.88300 A-18 UG-T WR 0.001 20 KB-11 1,3,4,9,r

589 1978 491 SS 1978 AUG 10 07:59:57.9 NZ-NS 73.29100 54.88300 A-18 UG-T WR 0.001 20 KB-11 1,3,4,9,r

590 1978 491 SS 1978 AUG 10 07:59:57.9 NZ-NS 73.29100 54.88300 A-18 UG-T WR 0.001 20 KB-11 1,3,4,9,r

591 1978 491 SS 1978 AUG 10 07:59:57.9 NZ-NS 73.29100 54.88300 A-18 -500 D UG-T WR 20 150 V 70 Ci KB-11 1,3,4,9,r

592 1978 491 SS 1978 AUG 10 07:59:57.9 NZ-NS 73.29100 54.88300 A-18 UG-T FS 0.001 20 KB-11 1,3,4,9,r

593 1978 492 Kraton-3 1978 AUG 24 18:00:00.4 -RU 65.92500 112.33800 KR-3 -577 UG-S I-SS 22 13 S 22 5.10 V A 1,3,4,5,9,r

594 1978 493 S 1978 AUG 29 02:36:59.95 STS-D 49.81333 78.10861 A 107 770 A UG-T WR 0.001 20 9.2 S 14 5.20 C A 1,3,4,5,6,8,9,r

595 1978 493 SS 1978 AUG 29 02:37:00.0 STS-D 49.81333 78.10861 A 107 770 A UG-T WR 0.001 20 C 1,3,4,6,9,r

596 1978 493 SS 1978 AUG 29 02:37:00.0 STS-D 49.81333 78.10861 A 107 770 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

597 1978 494 1978 AUG 29 02:37:08.75 STS-B 50.00611 78.96722 A 1228 A UG-S WR 20 150 119 119 5.90 A 1,3,4,5,6,7,8,9

598 1978 495 1978 SEP 12 04:59:58.5 -KZ-BA 47.90900 47.91200 A-II-5 -600 UG-CS I 0.08 0.08 C \* 1,3,4,9,r

599 1978 496 1978 SEP 15 02:36:59.97 STS-B 49.92833 78.86167 A 1211 A UG-S WR 20 150 81 81 5.89 A \* 1,3,4,5,6,7,8,9

600 1978 497 1978 SEP 20 05:03:00.0 STS-D 49.79861 78.15000 A 605P 660 A UG-T WE 0.001 20 1.1 S 1.1 4.30 A 1,3,4,5,6,9,r

601 1978 498 Kraton-2 1978 SEP 21 15:00:00.2 -RU-K 66.59800 86.21000 KR-2 -890 UG-S I-SS 15 17 S 15 5.20 C A 1,3,4,5,9,r

602 1978 499 S 1978 SEP 27 02:04:58.6 NZ-NS 73.34900 54.67600 A-19 -350 D UG-T WR 20 150 44 S 60 5.63 C KB-11 A 1,3,4,5,8,9,r

603 1978 499 SS 1978 SEP 27 02:04:58.6 NZ-NS 73.34900 54.67600 A-19 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

604 1978 499 SS 1978 SEP 27 02:04:58.6 NZ-NS 73.34900 54.67600 A-19 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

605 1978 499 SS 1978 SEP 27 02:04:58.6 NZ-NS 73.34900 54.67600 A-19 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

606 1978 499 SS 1978 SEP 27 02:04:58.6 NZ-NS 73.34900 54.67600 A-19 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

607 1978 499 SS 1978 SEP 27 02:04:58.6 NZ-NS 73.34900 54.67600 A-19 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

608 1978 499 SS 1978 SEP 27 02:04:58.6 NZ-NS 73.34900 54.67600 A-19 UG-T SE 0 0.001 0.001 C KB-11 1,3,4,9,r

609 1978 500 Vyatka 1978 OCT 8 00:00 -RU-YK 61.55000 112.85000 43 -1545 UG-S I-OS 15 17 S 15 5.20 C A 1,3,4,5,9,r

610 1978 501 1978 OCT 15 05:37:00.14 STS-D 49.73667 78.11111 A 200ASM 645 A UG-T WE 0.001 20 7.6 S 12 5.15 C A \* 1,3,4,5,6,8,9,r

611 1978 502 Galit S 1978 OCT 17 04:59:59.1 -KZ-BA 47.85000 48.12000 A-VII -1040 UG-S I-CV 20 150 56 56 5.80 C A 1,3,4,5,6,9,r

612 1978 502 Galit SS 1978 OCT 17 04:59:59.1 -KZ-BA 47.85000 48.12000 A-VII UG-S I-CV 0.001 20 18 18 C 1,3,4,6,9,r

613 1978 503 Kraton-1 1978 OCT 17 14:00:00.2 -RU-T 63.18500 63.43200 KR-1 -593 UG-S I-SS 22 10 S 22 5.50 C A 1,3,4,5,9,r

614 1978 504 1978 OCT 31 04:17:00.19 STS-D 49.78861 78.10750 A 194 638 A UG-T FS 0.001 20 80 S 16 5.25 C A 1,3,4,5,6,8,9,r

615 1978 505 S 1978 NOV 4 05:05:59.86 STS-B 50.04167 78.94722 A 1302 A UG-S WR 20 150 44 T 44 5.56 C A \* 1,3,4,5,6,7,8,9

616 1978 505 SS 1978 NOV 4 05:05:59.9 STS-B 50.04167 78.94722 A 1302 A UG-S WR 0.001 20 C \* 1,3,4,6,7,9,r

617 1978 506 S 1978 NOV 29 04:33:00.17 STS-B 49.95333 78.79528 A 1222 A UG-S WR 20 150 101 T 101 5.21 A 1,3,4,5,6,8,9,r

618 1978 506 SS 1978 NOV 29 04:33:00.2 STS-B 49.95333 78.79528 A 1222 A UG-S WR 0.001 20 1,3,4,6,9,r

619 1978 507 1978 NOV 29 04:33:04.99 STS-D 49.78333 78.01556 A 162 750 A UG-T WR 0.001 20 11 S 110 5.96 C A 1,3,4,5,6,7,8,9

620 1978 508 1978 NOV 30 07:59:59.1 -KZ-BA 47.90900 47.91200 A-II-6 -600 UG-CS I 0.06 0.006 \*\* 0.006 C \* 1,3,4,9,r

621 1978 509 1978 DEC 14 04:43:00.03 STS-D 49.81583 78.10667 A 113P 768 A UG-T WR 0.001 20 2.9 S 4 4.74 A 1,3,4,5,6,8,9,r

622 1978 510 Galit 1978 DEC 18 07:59:58.5 -KZ-BA 47.86000 48.16000 A-IX -630 UG-S I-CV 103 45 S 103 5.90 C A 1,3,4,5,9,r

623 1978 511 S 1978 DEC 20 04:33:00.04 STS-D 49.81083 78.05417 A 803P 722 A UG-T WR 0.001 20 2.6 S 3.5 4.71 A 1,3,4,5,6,8,9,r

624 1978 511 SS 1978 DEC 20 04:33:00.0 STS-D 49.81083 78.05417 A 803P 722 A UG-T WR 0.001 20 1,3,4,6,9,r

625 1979 512 1979 JAN 10 08:00:00.0 -KZ-BA 47.90900 47.91200 A-II-7 -600 UG-CS I-CV 0.5 1.4 S 0.5 C A 1,3,4,5,9,r

626 1979 513 Galit S 1979 JAN 17 07:59:58.5 -KZ-BA 47.92000 48.12000 A-VIII -1000 UG-S I-CV 0.001 20 12 12 6.00 V A 1,3,4,5,6,9,r

627 1979 513 SS 1979 JAN 17 07:59:58.5 -KZ-BA 47.92000 48.12000 A-VIII UG-S I-CV 20 150 56 56 V 1,3,4,6,9,r

628 1979 514 1979 FEB 1 04:13:00.17 STS-B 50.08083 78.85333 A 1006 A UG-S WR 0.001 20 18 18 5.29 A 1,3,4,5,6,7,8,9

629 1979 515 S 1979 FEB 16 04:04:00.50 STS-SU 49.97400 77.66800 109 UG-S WR 0.001 20 15 S 23 5.39 A 1,3,4,5,8,9,r

630 1979 515 SS 1979 FEB 16 04:04:01 STS-SU 49.97400 77.66800 2803 UG-S WR 0.001 20 1,3,4,9,r

631 1979 516 1979 MAR 23 STS-D 49.81000 78.17139 A 115P 602 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

632 1979 517 1979 APR 10 STS-D 49.81000 78.17139 A 115PP 602 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

633 1979 518 S 1979 MAY 6 03:17:00.07 STS-D 49.76194 77.98250 A 701P 704 A UG-T WR 0.001 20 9 S 15 5.22 C A 1,3,4,5,6,8,9,r

634 1979 518 SS 1979 MAY 6 03:17:00.1 STS-D 49.76194 77.98250 A 701P 704 A UG-T WR 0.001 20 C 1,3,4,6,9,r

635 1979 519 S 1979 MAY 31 05:55:00.05 STS-D 49.81278 78.05944 A 141 745 A UG-T WR 0.001 20 10 S 17 5.27 C A 1,3,4,5,6,8,9,r

636 1979 519 SS 1979 MAY 31 05:55:00.1 STS-D 49.81278 78.05944 A 141 745 A UG-T WR 0.001 20 C 1,3,4,6,9,r

637 1979 519 SS 1979 MAY 31 05:55:00.1 STS-D 49.81278 78.05944 A 141 745 A UG-T WR 0.001 20 C 1,3,4,6,9,r

638 1979 519 SS 1979 MAY 31 05:55:00 STS-D 49.83417 78.08028 A 136P 638 A UG-T WR 0.001 20 C 1,3,4,6,9,r

639 1979 520 1979 JUN 12 STS-D 49.81000 78.17139 A 155PPP 602 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

640 1979 521 1979 JUN 23 02:57:00.11 STS-B 49.91472 78.84583 A 1223 A UG-S WR 20 150 149 149 6.16 A 1,3,4,5,6,7,8,9

641 1979 522 S 1979 JUL 7 03:46:59.87 STS-B 50.03306 78.98917 A 1225 A UG-S WR 20 150 97 T 97 5.84 C A 1,3,4,5,6,7,8,9

642 1979 522 SS 1979 JUL 7 03:46:59.9 STS-B 50.03306 78.98917 A 1225 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

643 1979 523 Galit S 1979 JUL 14 04:59:58.0 -KZ-BA 47.88000 48.12000 A-XI -980 UG-S I-CV 0.001 20 21 T 7 5.60 C A 1,3,4,5,9,r

644 1979 523 Galit SS 1979 JUL 14 04:59:58.0 -KZ-BA 47.88000 48.12000 A-XI UG-S I-CV 0.001 20 7 C 1,3,4,9,r

645 1979 523 Galit SS 1979 JUL 14 04:59:58.0 -KZ-BA 47.88000 48.12000 A-XI UG-S I-CV 0.001 20 7 C 1,3,4,9,r

646 1979 524 1979 JUL 18 03:17:04.92 STS-SU 49.91900 77.81200 2613 UG-S WR 0.001 20 12 5.16 C 1,3,4,6,8,9,r

647 1979 525 1979 JUL 18 03:17:04.9 STS-D 49.77722 78.11250 A 195P 600 A UG-T FS 0.001 20 9.2 S 14 5.20 A 1,3,4,5,6,8,9,r

648 1979 526 S 1979 AUG 4 03:56:59.67 STS-B 49.90306 78.88778 A 1085 A UG-S WR 0.001 20 153 S 150 6.13 A 1,3,4,5,6,7,8,9

649 1979 526 SS 1979 AUG 4 03:56:59.7 STS-B 49.90306 78.88778 A 1085 A UG-S WR 20 150 1,3,4,6,7,9,r

650 1979 527 Kimberlit-4 1979 AUG 12 18:00:00.2 -RU 61.80300 122.43000 KM-4 -980 UG-S I-SS 8.5 8.4 S 8.5 4.90 C A 1,3,4,5,9,r

651 1979 528 S 1979 AUG 18 02:51:59.71 STS-B 49.94806 78.91889 A 1226 A UG-S WR 20 150 179 S 150 6.13 C A 1,3,4,5,6,7,8,9

652 1979 528 SS 1979 AUG 18 02:51:59.7 STS-B 49.94806 78.91889 A 1226 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

653 1979 529 Kimberlit-3 1979 SEP 6 18:00:00.3 -RU-K 64.11000 99.56200 KM-3 -600 UG-S I-SS 8.5 8.4 S 8.5 4.90 C A 1,3,4,5,9,r

654 1979 530 Klivazh 1979 SEP 16 09:00:00.0 -UK 48.20000 38.30000 -900 UG-M I 0.3 0.3 C \* 1,3,4,9,r

655 1979 531 S 1979 SEP 24 03:29:58.75 NZ-NS 73.34300 54.67200 A-32 -500 D UG-T WR 20 150 55 S 130 5.77 V 170 Ci KB-11 A 1,3,4,5,8,9,r

656 1979 531 SS 1979 SEP 24 03:29:58.8 NZ-NS 73.34300 54.67200 A-32 UG-T WR 0.001 20 KB-11 1,3,4,9,r

657 1979 531 SS 1979 SEP 24 03:29:58.8 NZ-NS 73.34300 54.67200 A-32 UG-T WR 0.001 20 KB-11 1,3,4,9,r

658 1979 532 1979 SEP 27 04:13:00.00 STS-D 49.75056 78.04917 A 175P 682 A UG-T WE 0.001 20 1.4 S 1.6 4.42 C A 1,3,4,5,6,8,9,r

659 1979 533 Kimberlit-1 1979 OCT 4 16:00:00.0 -RU-T 60.67500 71.45500 KM-1 -840 UG-S I-SS 22 27 S 22 5.40 C A 1,3,4,5,9,r

660 1979 534 Sheksna 1979 OCT 7 21:00:00.2 -RU-YK 61.85000 113.10000 47 -1550 UG-S I-OS 15 10 S 15 5.00 C A 1,3,4,5,9,r

661 1979 535 S 1979 OCT 18 04:17:00.11 STS-D 49.82417 78.09750 A 128 659 A UG-T WR 0.001 20 9 S 15 5.23 A 1,3,4,5,6,8,9,r

662 1979 535 SS 1979 OCT 18 04:17:00.1 STS-D 49.82417 78.09750 A 128 659 A UG-T WR 0.001 20 1,3,4,6,9,r

663 1979 536 S 1979 OCT 18 07:09:58.75 NZ-NS 73.31600 54.81600 A-20 -500 DMX UG-T WR 20 150 70 S 150 5.85 V 40 Ci KB-11 A 1,3,4,5,8,9,r

664 1979 536 SS 1979 OCT 18 07:09:58.8 NZ-NS 73.31600 54.81600 A-20 UG-T WR 0.001 20 KB-11 1,3,4,9,r

665 1979 536 SS 1979 OCT 18 07:09:58.8 NZ-NS 73.31600 54.81600 A-20 UG-T WR 20 150 KB-11 1,3,4,9,r

666 1979 536 SS 1979 OCT 18 07:09:58.8 NZ-NS 73.31600 54.81600 A-20 UG-T WR 0.001 20 KB-11 1,3,4,9,r

667 1979 537 Galit S 1979 OCT 24 05:59:59.0 -KZ-BA 47.85000 48.14000 A-X -850 UG-S I-CV 0.001 20 33 T 3 5.80 C A 1,3,4,5,9,r

668 1979 537 Galit SS 1979 OCT 24 05:59:59.0 -KZ-BA 47.85000 48.14000 A-X UG-S I-CV 20 150 30 C 1,3,4,9,r

669 1979 538 S 1979 OCT 28 03:16:59.55 STS-B 49.99667 78.99500 A 1224 A UG-S WR 0.001 20 139 T 120 5.98 C A 1,3,4,5,6,7,8,9

670 1979 538 SS 1979 OCT 28 03:16:59.6 STS-B 49.99667 78.99500 A 1224 A UG-S WR 20 150 C 1,3,4,6,7,9,r

671 1979 539 1979 NOV 30 04:53:00.58 STS-D 49.78306 78.08667 A 192P 635 A UG-T WR 0.001 20 1.6 S 1.6 4.42 C A 1,3,4,5,6,8,9,r

672 1979 540 S 1979 DEC 2 04:37:00.06 STS-B 49.90944 78.78444 A 1309 A UG-S WR 0.001 20 93 T 93 5.99 A 1,3,4,5,6,7,8,9

673 1979 540 SS 1979 DEC 2 04:37:00.1 STS-B 49.90944 78.78444 A 1309 A UG-S FS 20 150 1,3,4,6,7,9,r

674 1979 541 1979 DEC 21 04:42:00.09 STS-D 49.79222 78.11300 A 802P 727 A UG-T WR 0.001 20 2.7 S 3.6 4.71 A 1,3,4,5,6,8,9,r

675 1979 542 S 1979 DEC 23 04:56:59.9 STS-B 49.93222 78.75278 A Glubokaya-1 A UG-S WR 20 150 137 T 137 6.13 C A 1,3,4,5,6,7,8,9

676 1979 542 SS 1979 DEC 23 04:56:59.9 STS-B 49.93222 78.75278 A Glubokaya-1 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

677 1980 543 1980 MAR 14 STS-D 49.82333 78.04167 A 603P 677 A UG-T SE 0 0.001 0.001 1,3,4,6,9,r

678 1980 544 1980 APR 4 05:32:59.83 STS-SU 50.00000 77.82300 126 UG-S WR 0.001 20 6 S 6 4.90 C A 1,3,4,5,6,8,9,r

679 1980 545 S 1980 APR 10 04:07:00.19 STS-D 49.78250 78.05722 A 181 655 A UG-T WR 0.001 20 5.5 S 8 4.98 C A 1,3,4,5,6,8,9,r

680 1980 545 SS 1980 APR 10 04:07:00.2 STS-D 49.78250 78.05722 A 181 655 A UG-T WR 0.001 20 C 1,3,4,6,9,r

681 1980 546 S 1980 APR 25 03:57:00.06 STS-B 49.97639 78.75944 A 1071 A UG-S WR 0.001 20 19 T\* 19 5.45 A 1,3,4,5,6,7,8,9

682 1980 546 SS 1980 APR 25 03:57:00.1 STS-B 49.97639 78.75944 A 1071 A UG-S WR 0.001 20 1,3,4,6,7,9,r

683 1980 547 S 1980 MAY 22 03:57:00.14 STS-D 49.77972 78.03639 A 173 691 A UG-T WR 0.001 20 18 S 35 5.53 C A 1,3,4,5,6,8,9,r

684 1980 547 SS 1980 MAY 22 03:57:00.1 STS-D 49.77972 78.03639 A 173 691 A UG-T WR 0.001 20 C 1,3,4,6,9,r

685 1980 547 SS 1980 MAY 22 03:57:00.1 STS-D 49.77972 78.03639 A 173 691 A UG-T WR 0.001 20 C 1,3,4,6,9,r

686 1980 548 1980 JUN 12 03:27:00.19 STS-B 49.98872 78.99108 A 1083 A UG-S WR 20 150 37 37 5.52 A 1,3,4,5,6,7,8,9

687 1980 549 Butan 1980 JUN 16 06:00:00.0 -RU-BK 52.90000 56.50000 1 -1400 UG-S I-OS 3.2 3.2 C 1,3,4,9,r

688 1980 550 Butan 1980 JUN 25 06:00:00.0 -RU-BK 52.90000 56.50000 3 -1390 UG-S I-OS 3.2 3.2 C 1,3,4,9,r

689 1980 551 1980 JUN 25 02:27:00.0 STS-D 49.82583 78.09944 A 127 -152 650 A UG-T WR 0.001 20 0.3 0.3 C 1,3,4,6,9,r

690 1980 552 S 1980 JUN 29 02:33:00.24 STS-B 49.94861 78.81806 A 1227 A UG-S WR 0.001 20 44 T 44 5.69 A 1,3,4,5,6,7,8,9

691 1980 552 SS 1980 JUN 29 02:33:00.2 STS-B 49.94861 78.81806 A 1227 A UG-S WR 0.001 20 1,3,4,6,7,9,r

692 1980 552 SS 1980 JUN 29 02:33:00.2 STS-B 49.94861 78.81806 A 1227 A UG-S WR 20 150 1,3,4,6,7,9,r

693 1980 553 S 1980 JUL 31 03:33:00.07 STS-D 49.79056 78.09083 A 902 689 A UG-T WR 0.001 20 11 S 20 5.33 A 1,3,4,5,6,8,9,r

694 1980 553 SS 1980 JUL 31 03:33:00.1 STS-D 49.79056 78.09083 A 902 689 A UG-T WR 0.001 20 1,3,4,6,9,r

695 1980 554 1980 SEP 14 02:42:41.71 STS-B 49.93667 78.79750 A 1220 A UG-S WR 20 150 196 S 200 6.21 A 1,3,4,5,6,7,8,9

696 1980 555 Dynamika 1980 SEP 25 06:21:13.06 STS-D 49.78333 78.08056 A K-1 663 A UG-T WE 0.001 20 3.3 S 5 4.83 C A \* 1,3,4,5,6,8,9,r

697 1980 556 Vega-1 1980 OCT 8 06:00:00.3 -RU-AS 46.75700 48.27500 1T -1025 UG-S I-CV 8.5 8.6 S 8.5 5.20 C A 1,3,4,5,9,r

698 1980 557 S 1980 OCT 11 07:09:57.47 NZ-NS 73.33600 54.94000 A-25 -600 D UG-T WR 20 150 130 T\* 130 5.76 C KB-11 A 1,3,4,5,8,9,r

699 1980 557 SS 1980 OCT 11 07:09:57.5 NZ-NS 73.33600 54.94000 A-25 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

700 1980 557 SS 1980 OCT 11 07:09:57.5 NZ-NS 73.33600 54.94000 A-25 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

701 1980 557 SS 1980 OCT 11 07:09:57.5 NZ-NS 73.33600 54.94000 A-25 UG-T WR 20 150 55 S C KB-11 A 1,3,4,5,9,r

702 1980 557 SS 1980 OCT 11 07:09:58 NZ-NS 73.30000 54.90000 \* A-30 UG-T WR 0.001 20 V 5 Ci KB-11 1,3,4,9,r

703 1980 557 SS 1980 OCT 11 07:09:58 NZ-NS 73.30000 54.90000 \* A-30 UG-T WR 0.001 20 KB-11 1,3,4,9,r

704 1980 557 SS 1980 OCT 11 07:09:58 NZ-NS 73.30000 54.90000 \* A-30 UG-T WR 0.001 20 KB-11 1,3,4,9,r

705 1980 558 S 1980 OCT 12 03:34:16.65 STS-B 49.96750 79.02250 A 1087 -440 A UG-S WR 20 150 102 T 102 5.88 300 V A 1,3,4,5,6,7,8,9

706 1980 558 SS 1980 OCT 12 03:34:16.7 STS-B 49.96750 79.02250 A 1087 -510 A UG-S WR 20 150 C 1,3,4,6,7,9,r

707 1980 559 1980 OCT 23 03:57:11.0 STS-D 49.75167 78.13167 A 204P 579 A UG-T WR 0.001 20 C 1,3,4,6,9,r

708 1980 560 Batolit-1 1980 NOV 1 13:00:00.4 -RU-K 60.80000 97.55000 BT-1 -720 UG-S I-SS 8 17 S 8 5.20 C A 1,3,4,5,9,r

709 1980 561 1980 DEC 5 04:17 STS-D 49.75167 78.13167 ?A 204PP -36 579 A UG-T WR 0.001 20 0.1 0.1 V \* 1,3,4,6,9,r

710 1980 562 S 1980 DEC 5 04:17:16.0 STS-D 49.83083 78.11389 A 111P 640 A UG-T WR 0.001 20 1,3,4,6,9,r

711 1980 562 SS 1980 DEC 5 04:17:16.0 STS-D 49.83083 78.11389 A 111P 640 A UG-T WR 0.001 20 1,3,4,6,9,r

712 1980 562 SS 1980 DEC 5 04:17:16.0 STS-D 49.83083 78.11389 A 111P 640 A UG-T WR 0.001 20 1,3,4,6,9,r

713 1980 563 Angara 1980 DEC 10 07:00:00.1 -RU-T 61.75000 66.75000 Angara -2485 UG-S I-OS 15 4.1 S 15 4.60 C A 1,3,4,5,9,r

714 1980 564 S 1980 DEC 14 03:47:09.01 STS-B 49.90889 78.91861 A 1086 A UG-S WR 0.001 20 101 T 101 5.93 A 1,3,4,5,6,7,8,9

715 1980 564 SS 1980 DEC 14 03:47:09.0 STS-B 49.90889 78.91861 A 1086 A UG-S WR 0.001 20 1,3,4,6,7,9,r

716 1980 564 SS 1980 DEC 14 03:47:09.0 STS-B 49.90889 78.91861 A 1086 A UG-S WR 20 150 1,3,4,6,7,9,r

717 1980 565 1980 DEC 26 04:07:09.3 STS-D 49.82611 78.09194 A 3-2P 660 A UG-T WR 0.001 20 0.97 S 2 4.50 A 1,3,4,5,6,9,r

718 1980 566 S 1980 DEC 27 04:09:10.63 STS-B 50.06194 78.97528 A 1303 A UG-S WR 20 150 100 T 100 5.87 C A 1,3,4,5,6,7,8,9

719 1980 566 SS 1980 DEC 27 04:09:10.6 STS-B 50.06194 78.97528 A 1303 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

720 1981 567 1981 MAR 25 STS-D 49.82333 78.04167 A 603-PP 677 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

721 1981 568 S 1981 MAR 29 04:03:52.58 STS-B 50.01806 78.97881 A 1234 A UG-S WR 0.001 20 30 T 30 5.49 C A 1,3,4,5,6,7,8,9

722 1981 568 SS 1981 MAR 29 04:03:52.6 STS-B 50.01806 78.97881 A 1234 A UG-S FS 0.001 20 C 1,3,4,6,7,9,r

723 1981 568 SS 1981 MAR 29 04:03:52.6 STS-B 50.01806 78.97881 A 1234 A UG-S FS 0.001 20 C 1,3,4,6,7,9,r

724 1981 569 S 1981 APR 22 01:17:13.91 STS-B 49.89889 78.80861 A 1232 A UG-S WR 20 150 92 T 92 5.94 C A 1,3,4,5,6,7,8,9

725 1981 569 SS 1981 APR 22 01:17:13.9 STS-B 49.89889 78.80861 A 1232 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

726 1981 569 SS 1981 APR 22 01:17:13.9 STS-B 49.89889 78.80861 A 1232 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

727 1981 570 Pirit 1981 MAY 25 05:00:00.3 -RU-A 68.20000 53.50000 Pirit -1511 UG-S I-FE 37.6 34 S 37.6 5.50 C A 1,3,4,5,9,r

728 1981 571 1981 MAY 27 03:58:14.88 STS-B 49.98694 78.97056 A 1203 A UG-S WR 0.001 20 20 20 5.30 A 1,3,4,5,6,7,8,9

729 1981 572 1981 JUN 4 STS-D 49.82333 78.04167 A 603-PP 677 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

730 1981 573 S 1981 JUN 30 01:57:15.34 STS-D 49.76750 78.08083 A 187 633 A UG-T WR 0.001 20 10 S 12 5.16 C A 1,3,4,5,6,8,9,r

731 1981 573 SS 1981 JUN 30 01:57:15.3 STS-D 49.76750 78.08083 A 187 633 A UG-T WR 0.001 20 C 1,3,4,6,9,r

732 1981 574 1981 JUL 17 02:37:18.12 STS-D 49.80139 78.13139 A 106 -146 802 A UG-T WR 0.001 20 9.3 9.3 5.07 A 1,3,4,5,6,8,9,r

733 1981 575 S 1981 AUG 14 02:27:15.24 STS-D 49.75222 78.05306 A 184 717 A UG-T WR 0.001 20 5.6 S 5.6 4.88 A 1,3,4,5,6,8,9,r

734 1981 575 SS 1981 AUG 14 02:27:15.2 STS-D 49.75222 78.05306 A 184 717 A UG-T WR 0.001 20 1,3,4,6,9,r

735 1981 575 SS 1981 AUG 14 02:27:15.2 STS-D 49.75222 78.05306 A 184 717 A UG-T WR 0.001 20 1,3,4,6,9,r

736 1981 576 Geliy-1 1981 SEP 2 04:00:00.0 -RU-P 60.60000 55.70000 401 -2090 UG-S I-OS 3.2 2.6 S 3.2 4.40 A 1,3,4,5,9,r

737 1981 577 1981 SEP 13 02:17:20.84 STS-B 49.91333 78.89444 A 1233 A UG-S WR 20 150 163 S 150 6.06 A 1,3,4,5,6,7,8,9

738 1981 578 Vega 1981 SEP 26 05:00:00.3 -RU-AS 46.79000 48.31300 2T/2 -1050 UG-S I-CV 8.5 8.6 S 8.5 5.20 C A 1,3,4,5,9,r

739 1981 579 Vega 1981 SEP 26 05:03:59.9 -RU-AS 46.77100 48.30400 4T/2 -1050 UG-S I-CV 8.5 10 S 8.5 5.30 C A 1,3,4,5,9,r

740 1981 580 S 1981 OCT 1 12:14:57.23 NZ-NS 73.30400 54.81800 A-23 -600 DMN UG-T WR 20 150 140 T\* 140 5.97 C KB-11 A 1,3,4,5,8,9,r

741 1981 580 SS 1981 OCT 1 12:14:57.2 NZ-NS 73.30400 54.81800 A-23 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

742 1981 580 SS 1981 OCT 1 12:14:57.2 NZ-NS 73.30400 54.81800 A-23 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

743 1981 580 SS 1981 OCT 1 12:14:57.2 NZ-NS 73.30400 54.81800 A-23 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

744 1981 581 1981 OCT 16 STS-D 49.83417 78.08028 A 136-PP 638 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

745 1981 582 S 1981 OCT 18 03:57:05.22 STS-B 49.92806 78.84472 A 1236 A UG-S WR 20 150 107 T 107 6.00 C A 1,3,4,5,6,7,8,9

746 1981 582 SS 1981 OCT 18 03:57:05.2 STS-B 49.92806 78.84472 A 1236 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

747 1981 583 Shpat-2 1981 OCT 22 14:00:00.4 -RU-K 63.80000 97.55000 ShP-2 -580 UG-S I-SS 8.5 13 S 8.5 5.10 C A 1,3,4,5,9,r

748 1981 584 S 1981 NOV 20 04:57:05.07 STS-D 49.73667 78.10417 A 103 620 A UG-T WR 0.001 20 8.2 S 8 5.00 A 1,3,4,5,6,8,9,r

749 1981 584 SS 1981 NOV 20 04:57:05.1 STS-D 49.73667 78.10417 A 103 620 A UG-T WR 0.001 20 1,3,4,6,9,r

750 1981 585 S 1981 NOV 29 03:35:11.20 STS-B 49.90194 78.84889 A 1237 A UG-S WR 0.001 20 31 T 31 5.62 A 1,3,4,5,6,7,8,9

751 1981 585 SS 1981 NOV 29 03:35:11.2 STS-B 49.90194 78.84889 A 1237 A UG-S WR 0.001 20 1,3,4,6,7,9,r

752 1981 585 SS 1981 NOV 29 03:35:11.2 STS-B 49.90194 78.84889 A 1237 A UG-S WR 0.001 20 1,3,4,6,7,9,r

753 1981 586 S 1981 DEC 22 04:31:05.27 STS-D 49.83417 78.08028 A 135 638 A UG-T WR 0.001 20 6.6 S 7 4.96 A 1,3,4,5,6,8,9,r

754 1981 586 SS 1981 DEC 22 04:31:05.3 STS-D 49.83417 78.08028 A 135 638 A UG-T WR 0.001 20 1,3,4,6,9,r

755 1981 586 SS 1981 DEC 22 04:31:05.3 STS-D 49.83417 78.08028 A 135 638 A UG-T WR 0.001 20 1,3,4,6,9,r

756 1981 587 1981 DEC 27 03:43:16.72 STS-B 49.93306 78.77833 A 1312 A UG-S WR 20 150 156 S 150 6.16 C A 1,3,4,5,6,7,8,9

757 1982 588 S 1982 FEB 19 03:56:13.42 STS-D 49.82333 78.03333 A 150 623 A UG-T WR 0.001 20 14 S 24 5.40 C A 1,3,4,5,6,8,9,r

758 1982 588 SS 1982 FEB 19 03:56:13.4 STS-D 49.82333 78.03333 A 150 623 A UG-T WR 0.001 20 C 1,3,4,6,9,r

759 1982 X 1982 APR 6 STS-D 49.83400 78.08000 \* 136-3p UG-T 0.001 MX 0 C P 1,3,4,5,9,r,v

760 1982 589 S 1982 APR 25 03:23:07.99 STS-B 49.91694 78.88778 A 1219 A UG-S FS 20 150 145 T 145 6.03 C A 1,3,4,5,6,7,8,9

761 1982 589 SS 1982 APR 25 03:23:08.0 STS-B 49.91694 78.88778 A 1219 A UG-S FS 20 150 C 1,3,4,6,7,9,r

762 1982 589 SS 1982 APR 25 03:23:08.0 STS-B 49.91694 78.88778 A 1219 A UG-S FS 20 150 C 1,3,4,6,7,9,r

763 1982 590 S 1982 JUN 25 02:03:07.16 STS-D 49.77139 78.11083 A 196 590 A UG-T WE 0.001 20 3.6 S 2.4 4.57 C A 1,3,4,5,6,8,9,r

764 1982 590 SS 1982 JUN 25 02:03:07.2 STS-D 49.77139 78.11083 A 196 590 A UG-T WR 0.001 20 C 1,3,4,6,9,r

765 1982 591 S 1982 JUL 4 01:17:16.68 STS-B 49.95861 78.81167 A 1321 A UG-S WR 0.001 20 136 T 136 6.08 A 1,3,4,5,6,7,8,9

766 1982 591 SS 1982 JUL 4 01:17:16.7 STS-B 49.95861 78.81167 A 1321 A UG-S WR 20 150 1,3,4,6,7,9,r

767 1982 591 SS 1982 JUL 4 01:17:16.7 STS-B 49.95861 78.81167 A 1321 A UG-S WR 0.001 20 1,3,4,6,7,9,r

768 1982 592 Rift-3 1982 JUL 30 21:00:00.0 -RU 53.80000 104.15000 RF-3 -860 UG-S I-SS 8.5 10 S 8.5 5.00 C A 1,3,4,5,9,r

769 1982 593 S 1982 AUG 23 02:43:06.70 STS-D 49.74028 78.03083 A 14P 665 A UG-T WR 0.001 20 2.8 S 1.7 4.44 C A 1,3,4,5,6,8,9,r

770 1982 593 SS 1982 AUG 23 02:43:06.7 STS-D 49.74028 78.03083 A 14P 665 A UG-T WR 0.001 20 C 1,3,4,6,9,r

771 1982 594 S 1982 AUG 31 01:31:03.19 STS-B 49.91417 78.76139 A 1317 A UG-S WR 0.001 20 8 T 8 5.20 C A 1,3,4,5,6,7,9,r

772 1982 594 SS 1982 AUG 31 01:31:03.2 STS-B 49.91417 78.76139 A 1317 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

773 1982 595 Rift-1 1982 SEP 4 18:00:00.1 -RU-K 69.20000 81.65000 RF-1 -960 UG-S I-SS 16 21 S 16 5.30 C A 1,3,4,5,9,r

774 1982 596 S 1982 SEP 21 02:57:03.17 STS-D 49.77917 78.12472 A 203 587 A UG-T WR 0.001 20 9.2 S 12 5.15 C A 1,3,4,5,6,8,9,r

775 1982 596 SS 1982 SEP 21 02:57:03.2 STS-D 49.77917 78.12472 A 203 587 A UG-T WR 0.001 20 C 1,3,4,6,9,r

776 1982 597 Rift-4 1982 SEP 25 18:00:00.2 -RU-K 64.35000 91.80000 RF-4 -550 UG-S I-SS 8.5 17 S 8.5 5.20 C A 1,3,4,5,9,r

777 1982 598 Neva-1 1982 OCT 10 05:00:00.2 -RU-YK 61.55000 112.85000 66 -1500 UG-S I-OS 15 21 S 15 5.30 C A 1,3,4,5,9,r

778 1982 599 S 1982 OCT 11 07:14:58.63 NZ-NS 73.33900 54.60800 A-37 ZR-1 250 UG-T WR 0.001 20 80 T 80 5.58 V 1 kCi KB-11 A 1,3,4,5,8,9,r

779 1982 599 SS 1982 OCT 11 07:14:58.6 NZ-NS 73.33900 54.60800 A-37 ZR- -500 350 DMN UG-T WR 20 150 ? KB-11 1,3,4,9,r

780 1982 599 SS 1982 OCT 11 07:14:58.6 NZ-NS 73.33900 54.60800 A-37 ZR-3 450 UG-T WR 0.001 20 ? KB-11 1,3,4,9,r

781 1982 599 SS 1982 OCT 11 07:14:58.6 NZ-NS 73.33900 54.60800 A-37 ZR-4 520 UG-T WR 0.001 20 ? KB-11 1,3,4,9,r

782 1982 600 Vega 1982 OCT 16 06:00:00.2 -RU-AS 46.75900 48.24700 3T -975 UG-S I-CV 13.5 80 T\* 13.5 5.20 C A 1,3,4,5,9,r

783 1982 601 Vega 1982 OCT 16 06:05:00.1 -RU-AS 46.75200 48.25800 5T -990 UG-S I-CV 8.5 8.6 S 8.5 5.20 C A 1,3,4,5,9,r

784 1982 602 Vega 1982 OCT 16 06:10:00.1 -RU-AS 46.76600 48.28800 6T -1100 UG-S I-CV 8.5 8.6 S 8.5 5.20 C A 1,3,4,5,9,r

785 1982 603 Vega 1982 OCT 16 06:15:00.2 -RU-AS 46.76000 48.30000 7T -1060 UG-S I-CV 8.5 8.6 S 8.5 5.40 C A 1,3,4,5,9,r

786 1982 604 S 1982 DEC 5 03:37:15.12 STS-B 49.93083 78.80972 A 1314 A UG-S WR 20 150 119 T 119 6.08 C A 1,3,4,5,6,7,8,9

787 1982 604 SS 1982 DEC 5 03:37:15.1 STS-B 49.93083 78.80972 A 1314 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

788 1982 605 S 1982 DEC 25 04:23:08.38 STS-D 49.78111 78.03500 A 172 -112 706 A UG-T WR 0.001 20 1.7 T 1.7 4.47 A 1,3,4,5,6,8,9,r

789 1982 605 SS 1982 DEC 25 04:23:08.4 STS-D 49.78111 78.03500 A 172 706 A UG-T WR 0.001 20 1,3,4,6,9,r

790 1982 606 S 1982 DEC 26 03:35:16.67 STS-B 50.06306 78.99389 A 1415 A UG-S FS 20 150 42 T 21 5.58 C A 1,3,4,5,6,7,8,9

791 1982 606 SS 1982 DEC 26 03:35:16.7 STS-B 50.06306 78.99389 A 1415 A UG-S WR 20 150 21 C 1,3,4,6,7,9,r

792 1983 607 1983 MAR 11 STS-D 49.82333 78.03333 A 150P 623 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

793 1983 608 1983 MAR 30 04:17:10.22 STS-D 49.78500 78.04056 A 177 670 A UG-T WR 0.001 20 0.49 S 2.7 4.61 C A 1,3,4,5,6,8,9,r

794 1983 X 1983 APR 11 STS-D 49.82300 78.03300 \* 150-2p UG-T 0.001 MX 0 C P 1,3,4,5,9,r,v

795 1983 609 1983 APR 12 03:41:08.26 STS-D 49.78556 78.08472 A 186 672 A UG-T WE 0.001 20 0.39 S 3 4.65 A 1,3,4,5,6,8,9,r

796 1983 610 S 1983 MAY 30 03:33:47.04 STS-D 49.74111 78.12028 A 215 -245 533 A UG-T FS 0.001 20 20 T 20 5.43 C A \* 1,3,4,5,6,8,9,r

797 1983 610 SS 1983 MAY 30 03:33:47.0 STS-D 49.74111 78.12028 A 215 -180 533 A UG-T WR 0.001 20 C \* 1,3,4,6,9,r

798 1983 X 1983 JUN 9 STS-D 49.82300 78.03300 \* 150-3p UG-T 0.001 MX 0 P 1,3,4,5,9,r,v

799 1983 611 S 1983 JUN 12 02:36:46.12 STS-B 49.92500 78.89806 A 1320 A UG-S WR 20 150 138 T 138 6.02 C A 1,3,4,5,6,7,8,9

800 1983 611 SS 1983 JUN 12 02:36:46.1 STS-B 49.92500 78.89806 A 1320 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

801 1983 612 1983 JUN 24 02:56:13.85 STS-D 49.73972 78.03583 A 176P 652 A UG-T WR 0.001 20 2.8 S 1.8 4.46 A 1,3,4,5,6,8,9,r

802 1983 613 Lira 1983 JUL 10 04:00:00.0 -KZ-KA 51.36300 53.30600 1T -910 UG-S I-CV 15 21 S 15 5.30 C A 1,3,4,5,9,r

803 1983 614 Lira 1983 JUL 10 04:04:59.9 -KZ-KA 51.36700 53.32700 2T -920 UG-S I-CV 15 21 S 15 5.30 C A 1,3,4,5,9,r

804 1983 615 Lira 1983 JUL 10 04:09:59.9 -KZ-KA 51.38000 53.34000 3T -840 UG-S I-CV 15 21 S 15 5.30 C A 1,3,4,5,9,r

805 1983 616 S 1983 AUG 18 16:09:58.9 NZ-NS 73.35400 54.97400 A-40 UG-T WR 20 150 250 T\* 150 5.91 V 2 Ci KB-11/A 1,3,4,5,8,9,r

806 1983 616 SS 1983 AUG 18 16:09:58.9 NZ-NS 73.35400 54.97400 A-40 UG-T WR 0.001 20 KB-11/Ch-71,3,4,9,r

807 1983 616 SS 1983 AUG 18 16:09:58.9 NZ-NS 73.35400 54.97400 A-40 UG-T WR 0.001 20 KB-11/Ch-71,3,4,9,r

808 1983 616 SS 1983 AUG 18 16:09:58.9 NZ-NS 73.35400 54.97400 A-40 UG-T PR 0.001 20 KB-11/Ch-71,3,4,9,r

809 1983 616 SS 1983 AUG 18 16:09:58.9 NZ-NS 73.35400 54.97400 A-40 UG-T SE 0.001 20 KB-11/Ch-71,3,4,9,r

810 1983 617 Dynamika 1983 SEP 11 06:33:13.10 STS-D 49.78472 78.08417 A K-2 665 A UG-T WE 0.001 20 4.5 S 1.9 4.48 A \* 1,3,4,5,6,8,9,r

811 1983 618 Vega 1983 SEP 24 05:00:00.0 -RU-AS 46.78300 48.31500 8RT -1050 UG-S I-CV 8.5 6.8 S 8.5 5.20 C A 1,3,4,5,9,r

812 1983 619 Vega 1983 SEP 24 05:05:00.0 -RU-AS 46.78800 48.29700 9RT -1050 UG-S I-CV 8.5 5.4 S 8.5 5.10 C A 1,3,4,5,9,r

813 1983 620 Vega 1983 SEP 24 05:10:00.1 -RU-AS 46.76700 48.31000 10RT -920 UG-S I-CV 8.5 4.2 S 8.5 5.00 C A 1,3,4,5,9,r

814 1983 621 Vega 1983 SEP 24 05:15:00.1 -RU-AS 46.74900 48.30300 11RT -1100 UG-S I-CV 8.5 8.6 S 8.5 5.20 C A 1,3,4,5,9,r

815 1983 622 Vega 1983 SEP 24 05:19:59.9 -RU-AS 46.75400 48.28900 12RT -950 UG-S I-CV 8.5 8.6 S 8.5 5.40 C A 1,3,4,5,9,r

816 1983 623 Vega 1983 SEP 24 05:25:00.0 -RU-AS 46.76600 48.27400 13RT -1070 UG-S I-CV 8.5 8.6 S 8.5 5.30 C A 1,3,4,5,9,r

817 1983 624 S 1983 SEP 25 13:09:58.22 NZ-NS 73.32800 54.54100 A-21 -500 DMN UG-T WR 20 150 70 S 100 5.77 KB-11 A 1,3,4,5,8,9,r

818 1983 624 SS 1983 SEP 25 13:09:58.2 NZ-NS 73.32800 54.54100 A-21 UG-T WR 0.001 20 KB-11 1,3,4,9,r

819 1983 624 SS 1983 SEP 25 13:09:58.2 NZ-NS 73.32800 54.54100 A-21 UG-T WR 0.001 20 KB-11 1,3,4,9,r

820 1983 624 SS 1983 SEP 25 13:09:58.2 NZ-NS 73.32800 54.54100 A-21 UG-T WE 0.001 20 KB-11 1,3,4,9,r

821 1983 625 S 1983 OCT 6 01:47:09.17 STS-B 49.92458 78.75069 A 1325 A UG-S WR 20 150 82 T 82 5.95 A 1,3,4,5,6,7,8,9

822 1983 625 SS 1983 OCT 6 01:47:09.2 STS-B 49.92458 78.75069 A 1325 A UG-S WR 0.001 20 1,3,4,6,7,9,r

823 1983 626 1983 OCT 26 01:55:07.42 STS-B 49.91250 78.82167 A 1307 A UG-S WR 20 150 114 114 6.04 A 1,3,4,5,6,7,8,9

824 1983 627 1983 NOV 2 04:18:54.0 STS-D 49.77917 78.12472 A 203P 587 A UG-T WR 0.001 20 1,3,4,6,9,r

825 1983 628 S 1983 NOV 20 03:27:06.90 STS-B 50.05083 78.99917 A 1235 A UG-S WR 0.001 20 20 T 20 5.33 C A 1,3,4,5,6,7,8,9

826 1983 628 SS 1983 NOV 20 03:27:06.9 STS-B 50.05083 78.99917 A 1235 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

827 1983 629 1983 NOV 29 02:19 STS-D 49.73028 78.09583 ?A 216 681 A UG-T WR 0.001 20 1,3,4,6,9,r

828 1983 630 S 1983 NOV 29 02:19:08.80 STS-D 49.75861 78.04861 A 180 823 A UG-T WR 0.001 20 14 S 19 5.31 A 1,3,4,5,6,8,9,r

829 1983 630 SS 1983 NOV 29 02:19:08.8 STS-D 49.75861 78.04861 A 180 823 A UG-T WR 0.001 20 1,3,4,6,9,r

830 1983 631 1983 DEC 26 04:29:09.25 STS-D 49.79000 78.10917 A 129 611 A UG-T FS 0.001 20 18 S 30 5.48 C A 1,3,4,5,6,8,9,r

831 1984 632 1984 FEB 19 03:57:05.92 STS-B 49.89611 78.74306 A 1331 A UG-S WR 20 150 49 49 5.77 A 1,3,4,5,6,7,8,9

832 1984 633 1984 MAR 7 02:39:08.86 STS-B 50.05000 78.95611 A 1308 A UG-S WR 20 150 42 42 5.56 C A 1,3,4,5,6,7,8,9

833 1984 634 1984 MAR 29 05:19:10.75 STS-B 49.91111 78.92694 A 1335 A UG-S WR 20 150 83 83 5.86 C A 1,3,4,5,6,7,8,9

834 1984 635 S 1984 APR 15 03:17:11.46 STS-D 49.76056 78.08917 A 190 650 A UG-T WR 20 150 30 S 60 5.72 C A 1,3,4,5,6,8,9,r

835 1984 635 SS 1984 APR 15 03:17:11.5 STS-D 49.76056 78.08917 A 190 650 A UG-T WR 0.001 20 C 1,3,4,6,9,r

836 1984 636 S 1984 APR 25 01:09:06.09 STS-B 49.93583 78.85056 A 1316 A UG-S WR 20 150 76 T 76 5.90 C A 1,3,4,5,6,7,8,9

837 1984 636 SS 1984 APR 25 01:09:06.1 STS-B 49.93583 78.85056 A 1316 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

838 1984 637 S 1984 MAY 26 03:13:14.92 STS-B 49.97889 79.00556 A 1414 A UG-S WR 20 150 157 S 130 6.01 A 1,3,4,5,6,7,8,9

839 1984 637 SS 1984 MAY 26 03:13:14.9 STS-B 49.97889 79.00556 A 1414 A UG-S WR 0.001 20 1,3,4,6,7,9,r

840 1984 X 1984 JUN 7 STS-D 49.79000 78.10900 \* 129p UG-T 0.001 MX 0 P 1,3,4,5,9,r,v

841 1984 638 S 1984 JUL 14 01:09:13.08 STS-B 49.90944 78.87722 A 1344 A UG-S WR 20 150 135 T 135 6.10 A 1,3,4,5,6,7,8,9

842 1984 638 SS 1984 JUL 14 01:09:13.1 STS-B 49.90944 78.87722 A 1344 A UG-S WR 0.001 20 1,3,4,6,7,9,r

843 1984 639 Lira 1984 JUL 21 02:59:59.8 -KZ-KA 51.35800 53.31900 4T -850 UG-S I-CV 15 27 S 15 5.40 C A 1,3,4,5,9,r

844 1984 640 Lira 1984 JUL 21 03:04:59.7 -KZ-KA 51.37100 53.33700 5T -960 UG-S I-CV 15 5.5 S 15 5.30 C A 1,3,4,5,9,r

845 1984 641 Lira 1984 JUL 21 03:09:59.9 -KZ-KA 51.39100 53.35100 6T -840 UG-S I-CV 15 21 S 15 5.40 C A 1,3,4,5,9,r

846 1984 642 Kvarts-2 1984 AUG 11 19:00:00.2 -RU 65.05000 55.10000 K-2 -760 UG-S I-SS 8.5 3.4 S \*\* 85 5.30 C A 1,3,4,5,9,r

847 1984 643 Kvarts-3 1984 AUG 25 19:00:00.3 -RU-T 61.90000 72.10000 K-3 -725 UG-S I-SS 8.5 27 S 8.5 5.30 C A 1,3,4,5,9,r

848 1984 644 Dynamika 1984 AUG 26 03:30 NZ-NS 73.40000 54.80000 \* A-100 UG-T WE 0.001 20 0.6 3.80 C KB-11 \* 1,3,4,9,r

849 1984 645 Dnepr-2 S 1984 AUG 27 06:00:00.1 -RU-M 67.75000 33.00000 Dnepr-2 -180 UG-T I 1.7 3.2 S 1.7 4.70 C A \* 1,3,4,5,9,r

850 1984 645 Dnepr-2 SS 1984 AUG 27 06:00:00 -RU-M 67.75000 33.00000 Dnepr-2 -160 UG-T I 1.7 1.7 C \* 1,3,4,9,r

851 1984 646 Geliy 1984 AUG 28 02:59:59.8 -RU-P 60.30000 57.10000 402 -2065 UG-S I-OS 3.2 2.6 S 3.2 4.40 C A 1,3,4,5,9,r

852 1984 647 Geliy 1984 AUG 28 03:04:59.9 -RU-P 60.70000 57.50000 403 -2075 UG-S I-OS 3.2 3.3 S 3.2 4.40 C A 1,3,4,5,9,r

853 1984 648 S 1984 SEP 9 02:59:08.85 STS-D 49.80444 78.08750 A 132 719 A UG-T WE 0.001 20 5.7 S 6 4.89 C A 1,3,4,5,6,8,9,r

854 1984 648 SS 1984 SEP 9 02:59:08.9 STS-D 49.80444 78.08750 A 132 719 A UG-T WE 0.001 20 C 1,3,4,6,9,r

855 1984 648 SS 1984 SEP 9 02:59:08.9 STS-D 49.80444 78.08750 A 132 719 A UG-T WE 0.001 20 C 1,3,4,6,9,r

856 1984 648 SS 1984 SEP 9 02:59:08.9 STS-D 49.80444 78.08750 A 132 719 A UG-T WE 0.001 20 C 1,3,4,6,9,r

857 1984 649 Kvarts-4 1984 SEP 17 21:00:00.0 -RU 55.83400 87.52600 K-4 -560 UG-S I-SS 10 8.4 S 10 5.00 C A 1,3,4,5,9,r

858 1984 650 1984 OCT 18 04:57:08.32 STS-D 49.72944 78.08639 A 200M-bis -106 630 A UG-T WE 0.001 20 1.4 1.4 4.25 A 1,3,4,5,6,8,9,r

859 1984 651 S 1984 OCT 25 06:29:58.12 NZ-NS 73.35500 54.99000 A-26 -500 DMX UG-T WR 0.001 20 89 S 110 5.82 V 1.1 MCi Ch-70 A 1,3,4,5,8,9,r

860 1984 651 SS 1984 OCT 25 06:29:58.1 NZ-NS 73.35500 54.99000 A-26 UG-T WR 0.001 20 Ch-70 1,3,4,9,r

861 1984 651 SS 1984 OCT 25 06:29:58.1 NZ-NS 73.35500 54.99000 A-26 UG-T WR 0.001 20 Ch-70 1,3,4,9,r

862 1984 651 SS 1984 OCT 25 06:29:58.1 NZ-NS 73.35500 54.99000 A-26 UG-T WR 20 150 Ch-70 1,3,4,9,r

863 1984 X 1984 OCT 25 STS-D 49.79000 78.10900 \* 129-2p UG-T 0.001 MX 0 P 1,3,4,5,9,r,v

864 1984 654 1984 OCT 27 01:50:12.9 STS-B 49.93472 78.92806 A 1323 A UG-S WR 20 150 150 150 6.19 A 1,3,4,5,6,7,8,9

865 1984 652 Vega 1984 OCT 27 06:00:00.1 -RU-AS 46.90000 48.15000 14RT -850 UG-S I-CV 3.2 5.4 S 3.2 5.00 C A 1,3,4,5,9,r

866 1984 653 Vega 1984 OCT 27 06:05:00.0 -RU-AS 46.95000 48.10000 15RT -950 UG-S I-CV 3.2 5.4 S 3.2 5.00 C A 1,3,4,5,9,r

867 1984 655 S 1984 NOV 23 03:55:07.48 STS-D 49.81250 78.05944 A 803bis 732 A UG-T WR 0.001 20 2.8 S 1.4 4.38 A 1,3,4,5,6,8,9,r

868 1984 655 SS 1984 NOV 23 03:55:07.5 STS-D 49.81250 78.05944 A 803bis 732 A UG-T WR 0.001 20 1,3,4,6,9,r

869 1984 655 SS 1984 NOV 23 03:55:07.5 STS-D 49.81250 78.05944 A 803bis 732 A UG-T WR 0.001 20 1,3,4,6,9,r

870 1984 656 S 1984 DEC 2 03:19:08.94 STS-B 50.00611 79.00889 A 1411 A UG-S WR 20 150 79 T 79 5.77 A 1,3,4,5,6,7,8,9

871 1984 656 SS 1984 DEC 2 03:19:08.9 STS-B 50.00611 79.00889 A 1411 A UG-S FS 0.001 20 1,3,4,6,7,9,r

872 1984 657 S 1984 DEC 16 03:55:05.19 STS-B 49.94583 78.80861 A 1313 A UG-S WR 20 150 137 T 137 6.12 A 1,3,4,5,6,7,8,9

873 1984 657 SS 1984 DEC 16 03:55:05.2 STS-B 49.94583 78.80861 A 1313 A UG-S WR 0.001 20 1,3,4,6,7,9,r

874 1984 658 S 1984 DEC 28 03:50:13.15 STS-B 49.88028 78.70389 A 1353 A UG-S WR 20 150 105 T 105 6.00 A 1,3,4,5,6,7,8,9

875 1984 658 SS 1984 DEC 28 03:50:13.2 STS-B 49.88028 78.70389 A 1353 A UG-S PR 0.001 20 1,3,4,6,7,9,r

876 1985 659 S 1985 FEB 10 03:27:10.07 STS-B 49.89917 78.78056 A 1340 A UG-S WR 0.001 20 62 T 62 5.83 A 1,3,4,5,6,7,8,9

877 1985 659 SS 1985 FEB 10 03:27:10.1 STS-B 49.89917 78.78056 A 1340 A UG-S WR 0.001 20 1,3,4,6,7,9,r

878 1985 659 SS 1985 FEB 10 03:27:10.1 STS-B 49.89917 78.78056 A 1340 A UG-S WR 20 150 1,3,4,6,7,9,r

879 1985 660 S 1985 APR 25 00:57:09.10 STS-B 49.92667 78.88083 A 1319 A UG-S WR 20 150 74 T 74 5.84 C A 1,3,4,5,6,7,8,9

880 1985 660 SS 1985 APR 25 00:57:09.1 STS-B 49.92667 78.88083 A 1319 A UG-S WR 20 150 C 1,3,4,6,7,9,r

881 1985 661 S 1985 JUN 15 00:57:03.21 STS-B 49.90861 78.84278 A 1341 A UG-S WR 20 150 114 T 114 6.05 A 1,3,4,5,6,7,8,9

882 1985 661 SS 1985 JUN 15 00:57:03.2 STS-B 49.90861 78.84278 A 1341 A UG-S WR 0.001 20 1,3,4,6,7,9,r

883 1985 661 SS 1985 JUN 15 00:57:03 STS-B 49.92028 78.81944 A 1061bis A UG-S WR 0.001 20 1,3,4,6,7,9,r

884 1985 662 Benzol 1985 JUN 18 04:00:00.1 -RU-T 60.60000 72.70000 ? -2860 UG-S I-OS 2.5 2.5 C 1,3,4,9,r

885 1985 663 S 1985 JUN 30 02:39:05.13 STS-B 49.86444 78.66861 A 1354 A UG-S WR 0.001 20 86 T 86 5.92 A 1,3,4,5,6,7,8,9

886 1985 663 SS 1985 JUN 30 02:39:05.1 STS-B 49.86444 78.66861 A 1354 A UG-S WR 20 150 1,3,4,6,7,9,r

887 1985 664 1985 JUL 11 02:57:02.0 STS-D 49.75056 78.04917 A 175-PP 682 A UG-T WR 0.001 20 0.05 S 0.5 4.00 A 1,3,4,5,6,9,r

888 1985 666 Agat 1985 JUL 18 21:15:00.3 -RU 65.99400 41.03800 ? -770 UG-S I-SS 8.5 10 S 8.5 5.10 C A 1,3,4,5,9,r

889 1985 665 1985 JUL 19 04:00:08.0 STS-D 49.80111 78.06861 A 901 710 A UG-T WR 0.001 20 C 1,3,4,6,9,r

890 1985 667 1985 JUL 20 00:53:16.98 STS-B 49.94972 78.78389 A 1322 A UG-S WR 20 150 74 74 5.89 A 1,3,4,5,6,7,8,9

891 1985 668 S 1985 JUL 25 03:11:09.23 STS-D 49.81860 78.01640 A 152 654 A UG-T WR 0.001 20 1 S 5 4.82 A 1,3,4,5,6,8,9,r

892 1985 668 SS 1985 JUL 25 03:11:09.1 STS-D 49.81860 78.01640 A 152 654 A UG-T WR 0.001 20 1,3,4,6,9,r,v

893 1985 668 SS 1985 JUL 25 03:11:09.1 STS-D 49.81860 78.01640 A 152 654 A UG-T SE 0.001 20 1,3,4,6,9,r,v

894 1985 668 SS 1985 JUL 25 03:11:09.1 STS-D 49.81860 78.01640 A 152 654 A UG-T SE 0.001 20 1,3,4,6,9,r,v

895 1987 669 1987 FEB 26 04:58:24.3 STS-D 49.83417 78.08111 A 130 635 A UG-T FS 0.001 20 14 S 24 5.40 A 1,3,4,5,6,9,r

896 1987 670 S 1987 MAR 12 01:57:19.63 STS-B 49.93528 78.82889 A 1315 A UG-S WR 0.001 20 11 T 11 5.31 A 1,3,4,5,6,7,8,9

897 1987 670 SS 1987 MAR 12 01:57:19.6 STS-B 49.93528 78.82889 A 1315 A UG-S WR 0.001 20 1,3,4,6,7,9,r

898 1987 671 1987 APR 3 01:17:10.36 STS-B 49.91806 78.78028 A 1318 A UG-S WR 20 150 140 140 6.12 A 1,3,4,5,6,7,8,9

899 1987 672 S 1987 APR 3 01:17:12.32 STS-D 49.75389 78.11444 A 208 597 A UG-T WR 0.001 20 1 C 1,3,4,6,8,9,10,

900 1987 672 SS 1987 APR 3 01:17:12.3 STS-D 49.75389 78.11444 A 208 597 A UG-T WR 0.001 20 C 1,3,4,6,9,10,r

901 1987 672 SS 1987 APR 3 01:17:12.3 STS-D 49.75389 78.11444 A 208 597 A UG-T WR 0.001 20 C 1,3,4,6,9,10,r

902 1987 673 S 1987 APR 17 01:03:07.14 STS-B 49.87778 78.66889 A 1384 A UG-S WR 20 150 86 T 86 5.92 C A 1,3,4,5,6,7,8,9

903 1987 673 SS 1987 APR 17 01:03:07.1 STS-B 49.87778 78.66889 A 1384 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

904 1987 673 SS 1987 APR 17 01:03:07.1 STS-B 49.87778 78.66889 A 1384 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

905 1987 X 1987 APR 17 STS-D 49.75100 78.04900 \* 175-3p UG-T 0.001 MX 0 C P 1,3,4,5,9,r,v

906 1987 674 Geliy 1987 APR 19 04:00:00.0 -RU-P 60.60000 57.20000 404 -2015 UG-S I-OS 3.2 3.3 S 3.2 4.50 C A 1,3,4,5,9,r

907 1987 675 Geliy 1987 APR 19 04:05:00.0 -RU-P 60.80000 57.50000 405 -2055 UG-S I-OS 3.2 2.6 S 3.2 4.50 C A 1,3,4,5,9,r

908 1987 676 1987 MAY 6 04:02:08.11 STS-D 49.77583 78.01222 A 164 772 A UG-T FS 0.001 20 23 S 40 5.60 A 1,3,4,5,6,8,9,r

909 1987 677 1987 JUN 6 02:37:09.25 STS-D 49.83667 78.06167 A 138 604 A UG-T FS 0.001 20 12 S 24 5.40 C A 1,3,4,5,6,8,9,r

910 1987 678 S 1987 JUN 20 00:53:07.16 STS-B 49.93528 78.74417 A 1326 A UG-S WR 20 150 107 T 107 6.03 A 1,3,4,5,6,7,8,9

911 1987 678 SS 1987 JUN 20 00:53:07.2 STS-B 49.93528 78.74417 A 1326 A UG-S WR 0.001 20 1,3,4,7,9,r

912 1987 679 Neva 2-1 1987 JUL 7 00:00:00.0 -RU-YK 61.50000 112.85000 68 -1515 UG-S I-OS 15 13 S 15 5.10 C A 1,3,4,5,9,r,w

913 1987 680 1987 JUL 17 01:17:09.18 STS-D 49.77583 78.01972 A 168 -267 738 A UG-T FS 20 150 78 78 5.80 C A 1,3,4,5,6,8,9,r

914 1987 681 Neva 2-2 1987 JUL 24 02:00:00.0 -RU-YK 61.45000 112.80000 61 -1520 UG-S I-OS 15 13 S 15 5.10 C A 1,3,4,5,9,r,w

915 1987 683 S 1987 AUG 2 00:58:09.27 STS-B 49.88056 78.87472 A 1348 A UG-S WR 0.001 20 72 T 72 5.83 A 1,3,4,5,6,8,9,r

916 1987 683 SS 1987 AUG 2 00:58:09.3 STS-B 49.88056 78.87472 A 1348 A UG-S WR 20 150 1,3,4,9,r

917 1987 683 SS 1987 AUG 2 00:58:09.3 STS-B 49.88056 78.87472 A 1348 A UG-S WR 20 150 1,3,4,9,r

918 1987 682 S 1987 AUG 2 02:00:00.2 NZ-NS 73.32600 54.60200 A-37A -390 \*\* UG-T WR 0.001 20 150 T\* 150 5.90 V 1 kCi Ch-70 A 1,3,4,5,9,r,al

919 1987 682 SS 1987 AUG 2 02:00:00.2 NZ-NS 73.32600 54.60200 A-37A \*\* UG-T WR 0.001 20 V Ch-70 1,3,4,9,r,al

920 1987 682 SS 1987 AUG 2 02:00:00.2 NZ-NS 73.32600 54.60200 A-37A \*\* UG-T WR 20 150 V Ch-70 1,3,4,9,r,al

921 1987 682 SS 1987 AUG 2 02:00:00.2 NZ-NS 73.32600 54.60200 A-37A \*\* UG-T FS 0.001 20 V Ch-70 1,3,4,9,r,al

922 1987 682 SS 1987 AUG 2 02:00:00.2 NZ-NS 73.32600 54.60200 A-37A \*\* UG-T SE 0.001 20 V Ch-70 1,3,4,9,r,al

923 1987 684 Neva 2-3 1987 AUG 12 01:30:00.5 -RU-YK 61.45000 112.80000 101 -834 UG-S I-OS 3.2 10 S 3.2 5.00 C A 1,3,4,5,9,r,w

924 1987 685 S 1987 SEP 18 02:32:10.01 STS-D 49.80444 78.08750 A 132P 719 A UG-T WE 0.001 20 1.1 S 1.1 4.30 A 1,3,4,5,6,8,9,r

925 1987 685 SS 1987 SEP 18 02:32:10.0 STS-D 49.80444 78.08750 A 132P 719 A UG-T SE 0.001 20 1,3,4,6,9,r

926 1987 686 Batolit-2 1987 OCT 3 15:15:00.0 -KZ 47.60000 56.20000 BT-2 -1000 UG-S I-SS 8.5 17 S 8.5 5.30 C A 1,3,4,5,9,r

927 1987 687 1987 OCT 16 06:06:06.99 STS-D 49.72972 78.08667 A K-85 -82 620 A UG-T WE 0.001 20 1.1 1.1 4.60 A 1,3,4,5,6,8,9,r

928 1987 688 S 1987 NOV 15 03:31:09.17 STS-B 49.89861 78.75806 A 1332 A UG-S WR 20 150 103 T 103 5.98 A 1,3,4,5,6,7,8,9

929 1987 688 SS 1987 NOV 15 03:31:09.2 STS-B 49.89861 78.75806 A 1332 A UG-S WR 0.001 20 1,3,4,7,9,r

930 1987 689 S 1987 DEC 13 03:21:07.25 STS-B 49.96306 78.79306 A 1355 A UG-S WR 0.001 20 137 T 137 6.06 A 1,3,4,5,6,7,8,9

931 1987 689 SS 1987 DEC 13 03:21:07.3 STS-B 49.96306 78.79306 A 1355 A UG-S WR 20 150 1,3,4,7,9,r

932 1987 690 1987 DEC 20 02:55:09.14 STS-D 49.77583 78.01222 A 164P 772 A UG-T FS 0.001 20 3.6 S 5 4.80 A 1,3,4,5,6,8,9,r

933 1987 691 S 1987 DEC 27 03:05:07.22 STS-B 49.87944 78.72500 A 1388 A UG-S WR 20 150 117 T 117 6.00 C A 1,3,4,5,6,7,8,9

934 1987 691 SS 1987 DEC 27 03:05:07.2 STS-B 49.87944 78.72500 A 1388 A UG-S WR 0.001 20 C 1,3,4,7,9,r

935 1988 692 S 1988 FEB 6 04:19:09.13 STS-D 49.77583 78.01972 A 168P 738 A UG-T WR 0.001 20 5 4.80 C 1,3,4,6,8,9,r

936 1988 692 SS 1988 FEB 6 04:19:09.1 STS-D 49.77583 78.01972 A 168P 738 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

937 1988 692 SS 1988 FEB 6 04:19:09.1 STS-D 49.77583 78.01972 A 168P 738 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

938 1988 693 S 1988 FEB 13 03:05:08.28 STS-B 49.93667 78.86389 A 1361 A UG-S WR 20 150 125 T 125 5.97 1,3,4,6,7,8,9,r

939 1988 693 SS 1988 FEB 13 03:05:08.3 STS-B 49.93667 78.86389 A 1361 A UG-S WR 0.001 20 1,3,4,7,9,r

940 1988 694 1988 APR 3 01:33:08.21 STS-B 49.90833 78.90833 A 1336 A UG-S WR 20 150 135 135 5.99 1,3,4,6,7,8,9,r

941 1988 695 1988 APR 22 09:30:09.44 STS-D 49.79028 78.10694 A 704 -124 629 A UG-T WE 0.001 20 2.3 2.3 4.90 C 1,3,4,6,8,9,r

942 1988 696 1988 MAY 4 00:57:09.15 STS-B 49.94944 78.75028 A 1359 A UG-S FS 20 150 132 132 6.09 1,3,4,6,7,8,9,r

943 1988 697 S 1988 MAY 7 22:49:58.34 NZ-NS 73.31400 54.55300 A-24 -300 DMN UG-T WE 20 150 T\* 80 5.58 V 1.1 kCi KB-11 1,3,4,8,9,r

944 1988 697 SS 1988 MAY 7 22:49:58.3 NZ-NS 73.31400 54.55300 A-24 UG-T WE 0.001 20 KB-11 1,3,4,9,r

945 1988 697 SS 1988 MAY 7 22:49:58.3 NZ-NS 73.31400 54.55300 A-24 UG-T WE 0.001 20 KB-11 1,3,4,9,r

946 1988 698 1988 JUN 14 02:27:09.00 STS-B 50.01889 78.96056 A 1421 A UG-S WR 0.001 20 4 4 4.80 1,3,4,6,7,8,9,r

947 1988 699 Rubin-2 1988 AUG 22 16:20:00.1 -RU-A 66.28000 78.49100 RN-2 -830 UG-S I-SS 15 15 5.30 C 1,3,4,9,r

948 1988 700 Rubin-1 1988 SEP 6 16:19:59.9 -RU-A 61.36100 48.09200 RN-1 -800 UG-S I-SS 8.5 8.5 4.80 C 1,3,4,9,r

949 1988 701 Shagan 1988 SEP 14 04:00:00.0 STS-B 49.87778 78.82306 A 1350 A UG-S JV 20 150150/118 150 6.03 C 1,3,4,6,7,8,9,r

950 1988 702 1988 OCT 18 03:40:09.16 STS-D 49.78000 78.01722 A 034 733 A UG-T WE 0.001 20 6 4.90 C 1,3,4,6,8,9,r

951 1988 703 1988 NOV 12 03:30:06.27 STS-B 50.04306 78.96889 A 1412 A UG-S WR 0.001 20 15 15 5.24 C 1,3,4,6,7,8,9,r

952 1988 704 S 1988 NOV 23 03:57:08.99 STS-D 49.77944 78.03722 A 169/1 -204 693 A UG-T WR 0.001 20 19 T 19 5.40 C 1,3,4,6,8,9,r

953 1988 704 SS 1988 NOV 23 03:57:09.0 STS-D 49.77944 78.03722 A 169/1 693 A UG-T FS 0.001 20 C 1,3,4,6,9,r

954 1988 704 SS 1988 NOV 23 03:57:09.0 STS-D 49.77944 78.03722 A 169/1 693 A UG-T SE 0 0.001 0.001 C 1,3,4,6,9,r

955 1988 705 S 1988 DEC 4 05:19:53.3 NZ-NS 73.36600 55.00100 A-27 -400 DMN UG-T WR 20 150 T\* 140 5.89 C Ch-70 1,3,4,8,9,r

956 1988 705 SS 1988 DEC 4 05:19:53.3 NZ-NS 73.36600 55.00100 A-27 UG-T WR 0.001 20 C Ch-70 1,3,4,9,r

957 1988 705 SS 1988 DEC 4 05:19:53.3 NZ-NS 73.36600 55.00100 A-27 UG-T WR 0.001 20 C Ch-70 1,3,4,9,r

958 1988 705 SS 1988 DEC 4 05:19:53.3 NZ-NS 73.36600 55.00100 A-27 UG-T WE 0.001 20 C Ch-70 1,3,4,9,r

959 1988 705 SS 1988 DEC 4 05:19:53.3 NZ-NS 73.36600 55.00100 A-27 UG-T SE 0 0.001 0.001 C Ch-70 1,3,4,9,r

960 1988 706 S 1988 DEC 17 04:18:09.24 STS-B 49.88194 78.92472 A 1346 A UG-S WR 20 150 68 T 68 5.83 1,3,4,6,7,8,9,r

961 1988 706 SS 1988 DEC 17 04:18:09.2 STS-B 49.88194 78.92472 A 1346 A UG-S WR 0.001 20 1,3,4,6,7,9,r

962 1988 707 S 1988 DEC 28 05:28:10.0 STS-D 49.80111 78.06861 A 901P 710 A UG-T WR 0.001 20 0.2 3.74 1,3,4,6,8,9,r

963 1988 707 SS 1988 DEC 28 05:28:10.0 STS-D 49.80111 78.06861 A 901P 710 A UG-T WR 0.001 20 1,3,4,6,9,r

964 1989 708 S 1989 JAN 22 03:57:09.06 STS-B 49.93944 78.81944 A 1328 A UG-S WR 0.001 20 118 T 118 6.10 1,3,4,6,7,8,9,r

965 1989 708 SS 1989 JAN 22 03:57:09.1 STS-B 49.93944 78.81944 A 1328 A UG-S WR 20 150 1,3,4,6,7,9,r

966 1989 709 1989 FEB 12 04:15:09.26 STS-B 49.91861 78.71111 A 1366 A UG-S WR 20 150 63 63 5.86 1,3,4,6,7,8,9,r

967 1989 710 1989 FEB 17 04:01:09.22 STS-D 49.82778 78.05972 A 139 648 A UG-T WR 0.001 20 10 5.10 C 1,3,4,6,8,9,r

968 1989 711 1989 JUL 8 03:47:00.09 STS-B 49.86778 78.78028 A 1352 A UG-S WR 20 150 22 22 5.55 C 1,3,4,6,7,8,9,r

969 1989 712 S 1989 SEP 2 04:16:59.85 STS-B 50.00583 78.98556 A 1410 A UG-S WR 0.001 20 6 T 6 4.94 C 1,3,4,6,7,8,9,r

970 1989 712 SS 1989 SEP 2 04:16:59.9 STS-B 50.00583 78.98556 A 1410 A UG-S WR 0.001 20 C 1,3,4,6,7,9,r

971 1989 713 1989 OCT 4 11:30:00.16 STS-D 49.74980 78.01170 A 169/2 -94 680 A UG-T WE 0.001 20 1.8 4 4.70 1,3,4,6,8,9,r,v

972 1989 714 S 1989 OCT 19 09:49:59.98 STS-B 49.92222 78.90833 A 1365 -628 A UG-S WR 20 150 85 T 85 5.86 C 1,3,4,6,8,9,r

973 1989 714 SS 1989 OCT 19 09:50:00.0 STS-B 49.92222 78.90833 A 1365 -592 A UG-S WR 0.001 20 C 1,3,4,9,r

974 1989 714 SS 1989 OCT 19 09:50:00.0 STS-B 49.92222 78.90833 A 1365 -556 A UG-S WR 0.001 20 C 1,3,4,9,r

975 1990 715 S 1990 OCT 24 14:57:58.45 NZ-NS 73.33100 54.75700 A13-N -600 UG-T WR 20 150 70 T 70 5.70 C KB-11 1,3,4,8,9,r

976 1990 715 SS 1990 OCT 24 14:57:58.5 NZ-NS 73.33100 54.75700 A13-N -600 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

977 1990 715 SS 1990 OCT 24 14:57:58.5 NZ-NS 73.33100 54.75700 A13-N -600 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

978 1990 715 SS 1990 OCT 24 14:57:58.5 NZ-NS 73.33100 54.75700 A13-N -600 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

979 1990 715 SS 1990 OCT 24 14:57:58.5 NZ-NS 73.33100 54.75700 A13-N -600 UG-T WR 0.001 20 C KB-11 1,3,4,9,r

980 1990 715 SS 1990 OCT 24 14:57:58.5 NZ-NS 73.33100 54.75700 A13-N -600 UG-T WR 0 0.001 0.001 C KB-11 1,3,4,9,r

981 1990 715 SS 1990 OCT 24 14:57:58.5 NZ-NS 73.33100 54.75700 A13-N -600 UG-T WR 0 0.001 0.001 C KB-11 1,3,4,9,r

982 1990 715 SS 1990 OCT 24 14:57:58.5 NZ-NS 73.33100 54.75700 A13-N -600 UG-T WR 0 0.001 0.001 C KB-11 1,3,4,9,r

## Database of nuclear tests, United States: 1945-1992

compiled by Wm. Robert Johnston  
last modified 8 November 2006

For explanations, codes, and sources see [Introduction](http://www.johnstonsarchive.net/nuclear/tests/USA-ntests0.html).

ID# SERIES SHOT YEAR MON DAY TIME SITE LAT LONG NT HOLE HOB GZALT NT TYPE PUR YD-MN YD-MX YD-EST NT YIELD MAG CRAT VENT DEVIC WARHEAD R N SOURCES

GMT GMT DEG DEG M M KT KT KT KT M

1 Trinity Trinity 1945 JUL 16 11:29:21.0 NM 33.67530 -106.47470 30 AS-T WR 21 21 152 IP Fat Man LANL 1,2,3

2 Alberta Little Boy 1945 AUG 5 23:16:02.0 -JP 34.39140 132.45810 580 A-AD C 15 15 Little BoyDOD \* 2,3,n

3 Alberta Fat Man 1945 AUG 9 01:58:00.0 -JP 32.77020 129.86570 503 A-AD C 21 21 Mk-3 DOD \* 2,3,n

4 Crossroads Able 1946 JUN 30 21:01:00.0 BK 11.58000 165.50000 \* 158 A-AD WE 21 21 IP Mk-3A LANL 1,2,3,7,b

5 Crossroads Baker 1946 JUL 24 21:34:59.8 BK 11.58330 165.50000 -27 UW WE 21 21 550 IP Mk-3A LANL 1,2,3,6

6 Sandstone X-ray 1948 APR 14 18:16:59.0 EN 11.67000 162.24000 \* 60 AS-T WR 37 37 55 Mk-3 LANL 1,2,3,7

7 Sandstone Yoke 1948 APR 30 18:08:59.0 EN 11.62000 162.33000 \* 60 AS-T WR 49 49 Mk-3 LANL 1,2,3,7

8 Sandstone Zebra 1948 MAY 14 18:04:00.0 EN 11.56000 162.35000 \* 60 AS-T WR 18 18 Mk-3 LANL 1,2,3,7

9 Ranger Able 1951 JAN 27 13:44:51.0 NTS-FF 36.80000 -115.95000 5 320 A-AD WR 1 1 Mk-4 LANL 1,2,3

10 Ranger Baker 1951 JAN 28 13:52:04.5 NTS-FF 36.80000 -115.95000 5 330 A-AD WR 8 8 Mk-4 LANL 1,2,3

11 Ranger Easy 1951 FEB 1 13:46:39.5 NTS-FF 36.80000 -115.95000 5 330 A-AD WR 1 1 Mk-4 LANL 1,2,3

12 Ranger Baker-2 1951 FEB 2 13:48:48.0 NTS-FF 36.80000 -115.95000 5 340 A-AD WR 8 8 Mk-4 LANL 1,2,3

13 Ranger Fox 1951 FEB 6 13:46:55.0 NTS-FF 36.80000 -115.95000 5 440 A-AD WR 22 22 Mk-6 LANL 1,2,3

14 Greenhouse Dog 1951 APR 7 17:33:57.8 EN 11.55580 162.35440 91 AS-T WR 81 81 238 Mk-6D LANL 1,2,3,d

15 Greenhouse Easy 1951 APR 20 17:27:00.1 EN 11.66890 162.24030 91 AS-T WR 47 47 255 TX-5D LANL 1,2,3,d

16 Greenhouse George 1951 MAY 8 20:30:00.7 EN 11.62690 162.31470 62 AS-T WR 225 225 347 LANL 1,2,3,d

17 Greenhouse Item 1951 MAY 24 17:16:59.3 EN 11.67300 162.24860 62 AS-T WR 45.5 45.5 BF LANL 1,2,d

18 Buster Able 1951 OCT 22 14:00:00.0 NTS-YF 37.08390 -116.02390 7 30 AS-T WR 0 0.1 0.05 LANL 1,2

19 Buster Baker 1951 OCT 28 15:20:08.9 NTS-YF 37.08500 -116.02000 7 340 A-AD WR 3.5 3.5 Mk-4 LANL 1,2,3

20 Buster Charlie 1951 OCT 30 15:00:29.8 NTS-YF 37.08500 -116.02030 7 350 A-AD WR 14 14 Mk-4 LANL 1,2,3

21 Buster Dog 1951 NOV 1 15:30:01.6 NTS-YF 37.08470 -116.01970 7 430 A-AD WR 21 21 Mk-4 LANL 1,2,3

22 Buster Easy 1951 NOV 5 16:29:58.2 NTS-YF 37.09190 -116.02440 7 400 A-AD WR 31 31 TX-7E LANL 1,2,3

23 Jangle Sugar 1951 NOV 19 16:59:59.7 NTS-YF 37.13170 -116.03860 9 1.1 AS WE 1.2 1.2 27 Mk-6 LANL 1,2,3,7

24 Jangle Uncle 1951 NOV 29 19:59:59.7 NTS-YF 37.16970 -116.04250 10 -10 1283 CR WE 1.2 1.2 79 LANL 1,2,3

25 Tumbler Able 1952 APR 1 17:00:07.5 NTS-FF 36.79830 -115.93560 5 240 A-AD WE 1 1 Mk-4 LANL 1,2,3

26 Tumbler Baker 1952 APR 15 17:29:57.1 NTS-YF 37.08420 -116.01940 7 340 A-AD WE 1 1 Mk-4 LANL 1,2,3

27 Tumbler Charlie 1952 APR 22 17:30:10.0 NTS-YF 37.08440 -116.02030 7 1050 A-AD WR 31 31 Mk-4 LANL 1,2,3

28 Snapper Dog 1952 MAY 1 16:29:59.1 NTS-YF 37.08420 -116.02030 7 320 A-AD WR 19 19 TX-7 LANL 1,2,3

29 Snapper Easy 1952 MAY 7 12:14:59.3 NTS-YF 37.05310 -116.10560 1 90 AS-T WR 12 12 TX-12 LANL 1,2,3

30 Snapper Fox 1952 MAY 25 11:59:59.6 NTS-YF 37.09560 -116.10560 4 90 AS-T WR 11 11 Mk-5 LANL 1,2,3

31 Snapper George 1952 JUN 1 11:54:59.8 NTS-YF 37.04810 -116.02110 3 90 AS-T WR 15 15 Mk-5 LANL 1,2,3

32 Snapper How 1952 JUN 5 11:55:00.3 NTS-YF 37.13860 -116.11780 2 90 AS-T WR 14 14 TX-12 LANL 1,2,3

33 Ivy Mike 1952 OCT 31 19:14:59.4 EN 11.23720 162.19640 10 AS WR 10400 10400 1902 TN LANL 1,2,3

34 Ivy King 1952 NOV 15 23:30:00.0 EN 11.56220 162.35250 450 A-AD WR 500 500 FS Mk-18F LANL 1,2,3

35 Upshot-Knothole Annie 1953 MAR 17 13:20:00.3 NTS-YF 37.04780 -116.02110 3 90 AS-T WR 16 16 Mk-5 LANL 1,2,3

36 Upshot-Knothole Nancy 1953 MAR 24 13:10:00.0 NTS-YF 37.09560 -116.10280 4 90 AS-T WR 24 24 TX-15 LANL 1,2,3

37 Upshot-Knothole Ruth 1953 MAR 31 13:00:00.0 NTS-YF 37.08280 -116.02390 7 90 AS-T WR 0.2 0.2 LLNL 1,2

38 Upshot-Knothole Dixie 1953 APR 6 15:29:38.4 NTS-YF 37.08470 -116.01800 7 1830 A-AD WR 11 11 Mk-5D LANL 1,2,3

39 Upshot-Knothole Ray 1953 APR 11 12:44:59.8 NTS-YF 37.09890 -116.09250 4 30 AS-T WR 0.2 0.2 LLNL 1,2

40 Upshot-Knothole Badger 1953 APR 18 12:35:00.0 NTS-YF 37.13830 -116.11780 2 90 AS-T WR 23 23 TX-16 LANL 1,2,3

41 Upshot-Knothole Simon 1953 APR 25 12:29:59.8 NTS-YF 37.05310 -116.10280 1 90 AS-T WR 43 43 TX-17/24 LLNL 1,2,3

42 Upshot-Knothole Encore 1953 MAY 8 15:29:55.4 NTS-FF 36.80000 -115.92890 ?? 5 740 A-AD WE 27 27 Mk-6D LANL 1,2,3

43 Upshot-Knothole Harry 1953 MAY 19 12:04:59.5 NTS-YF 37.04030 -116.02530 3 90 AS-T WR 32 32 TX-13D LANL 1,2,3

44 Upshot-Knothole Grable 1953 MAY 25 15:30:00.3 NTS-FF 36.79310 -115.91470 5 160 A WR 15 15 Mk-9 AFAP LANL \* 1,2,3

45 Upshot-Knothole Climax 1953 JUN 4 11:14:56.7 NTS-YF 37.08750 -116.01830 7 410 A-AD WR 61 61 Mk-7 LANL 1,2,3

46 Castle Bravo 1954 FEB 28 18:45:00.0 BK 11.69080 165.27360 2 AS WR 15000 15000 1984 TN TX-21 LANL 1,2,3

47 Castle Romeo 1954 MAR 26 18:30:00.4 BK 11.69080 165.27300 4.3 AW-BG WR 11000 11000 EC17 LANL 1,2,3

48 Castle Koon 1954 APR 6 18:20:00.4 BK 11.49670 165.36750 2.9 AS WR 110 110 302 LLNL 1,2,3

49 Castle Union 1954 APR 25 18:10:00.6 BK 11.66640 165.38720 4 AW-BG WR 6900 6900 915 LANL 1,2,3

50 Castle Yankee 1954 MAY 4 18:10:00.1 BK 11.66560 165.38690 4.3 AW-BG WR 13500 13500 EC24 LANL 1,2,3

51 Castle Nectar 1954 MAY 13 18:20:00.1 EN 11.67050 162.19640 4.3 AW-BG WR 1690 1690 TX-15 LANL 1,2,3

52 Teapot Wasp 1955 FEB 18 19:59:59.2 NTS-YF 37.08670 -116.02190 7 230 A-AD WE 1 1 LANL 1,2

53 Teapot Moth 1955 FEB 22 13:45:00.0 NTS-YF 37.04780 -116.02110 3 90 AS-T WR 2 2 XW-30? LANL 1,2,3

54 Teapot Tesla 1955 MAR 1 13:30:00.3 NTS-YF 37.12550 -116.04750 9 90 AS-T WR 7 7 LLNL 1,2

55 Teapot Turk 1955 MAR 7 13:20:00.2 NTS-YF 37.13830 -116.11750 2 150 AS-T WR 43 43 LLNL 1,2

56 Teapot Hornet 1955 MAR 12 13:19:59.8 NTS-YF 37.04030 -116.02530 3 90 AS-T WR 4 4 XW-30? LANL 1,2,3

57 Teapot Bee 1955 MAR 22 13:04:59.9 NTS-YF 37.09470 -116.02390 7 150 AS-T WR 8 8 XW-25? LANL 1,2,3

58 Teapot Ess 1955 MAR 23 20:30:00.0 NTS-YF 37.16830 -116.04390 10 -20 1280 CR WE 1 1 91 Mk-6 LANL 1,2,3

59 Teapot Apple-1 1955 MAR 29 12:55:00.1 NTS-YF 37.09560 -116.10280 4 150 AS-T WR 14 14 LANL 1,2

60 Teapot Wasp Prime 1955 MAR 29 17:59:54.8 NTS-YF 37.08670 -116.05780 7 230 A-AD WR 3 3 LANL 1,2

61 Teapot HA (High Altitude) 1955 APR 6 18:00:04.1 NTS-YF 37.02860 -116.05780 1 11160 A-AD WE 3 3 LANL 1,2

62 Teapot Post 1955 APR 9 12:30:00.2 NTS-YF 37.12220 -116.03440 9 90 AS-T WR 2 2 LLNL 1,2

63 Teapot MET (Military Effects T1955 APR 15 19:15:00.3 NTS-FF 36.79810 -115.92890 5 120 AS-T WE 22 22 Mk-7 LANL 1,2,3

64 Teapot Apple-2 1955 MAY 5 12:10:00.0 NTS-YF 37.05310 -116.10250 ? 1 150 AS-T WR 29 29 LANL 1,2

65 Wigwam Wigwam 1955 MAY 14 20:00:00.0 -PAC 28.73330 -126.26670 -610 UW WE 30 30 LANL 1,2

66 Teapot Zucchini 1955 MAY 15 11:59:59.9 NTS-YF 37.09470 -116.02390 7 150 AS-T WR 28 28 LANL 1,2

67 Project 56 Project 56 No. 1 1955 NOV 1 22:10 NTS-FF 36.90000 -115.95000 11a 0 AS SE 0 0 TX-39 pr? LANL 1,2,3,7,h

68 Project 56 Project 56 No. 2 1955 NOV 3 21:15 NTS-FF 36.90000 -115.95000 11b 0 AS SE 0 0 XW-25 LANL 1,2,3,7,h

69 Project 56 Project 56 No. 3 1955 NOV 5 19:55 NTS-FF 36.90000 -115.95000 11c 0 AS SE 0 0 XW-28 pr LANL 1,2,3,7,h

70 Project 56 Project 56 No. 4 1956 JAN 18 21:30 NTS-FF 36.90000 -115.95000 11d 0 AS SE 0 20 SL 0.01 XW-28 pr LANL 1,2,3,7,h

71 Redwing Lacrosse 1956 MAY 4 18:25:29.9 EN 11.55780 162.35500 5 AS WR 40 40 122 TX-39 pr LANL 1,2,3,7

72 Redwing Cherokee 1956 MAY 20 17:50:38.7 BK 11.66830 165.39420 1320 A-AD WR 3800 3800 TX-15/39 LANL 1,2,3

73 Redwing Zuni 1956 MAY 27 17:56:00.3 BK 11.49670 165.36920 3 AS WR 3500 3500 710 TX-41 LLNL 1,2,3

74 Redwing Yuma 1956 MAY 27 19:56 EN 11.62000 162.33000 \* 60 AS-T WR 0.19 0.19 LLNL 1,2,3,7

75 Redwing Erie 1956 MAY 30 18:15:29.3 EN 11.54440 162.36440 90 AS-T WR 14.9 14.9 TX-28C LANL 1,2,3

76 Redwing Seminole 1956 JUN 6 00:55:30.0 EN 11.67640 162.22220 2 AS WR 13.7 13.7 201 TX-28 pr LANL 1,2,3

77 Redwing Flathead 1956 JUN 11 18:26:00.1 BK 11.60000 165.45140 4.5 AW-BG WR 365 365 LANL 1,2,3

78 Redwing Blackfoot 1956 JUN 11 18:26:00.3 EN 11.55110 162.35860 60 AS-T WR 8 8 LANL 1,2

79 Redwing Kickapoo 1956 JUN 13 23:26 EN 11.62000 162.33000 \* 90 AS-T WR 1.49 1.49 LLNL 1,2,3,7

80 Redwing Osage 1956 JUN 16 01:13:53.1 EN 11.54670 162.36080 210 A-AD WR 1.7 1.7 XW-25 LANL 1,2,3

81 Redwing Inca 1956 JUN 21 21:26 EN 11.63000 162.35000 \* 60 AS-T WR 15.2 15.2 XW-45 LLNL 1,2,3,7

82 Redwing Dakota 1956 JUN 25 18:06:00.2 BK 11.60280 165.45140 AW-BG WR 1100 1100 TX-28C LANL 1,2,3

83 Redwing Mohawk 1956 JUL 2 18:06 EN 11.63000 162.31000 \* 90 AS-T WR 360 360 408 LLNL 1,2,3,7

84 Redwing Apache 1956 JUL 8 18:06:00.2 EN 11.67140 162.20030 AW-BG WR 1850 1850 XW-27 LLNL 1,2,3

85 Redwing Navajo 1956 JUL 10 17:56:00.3 BK 11.66330 165.38720 6 AW-BG WR 4500 4500 TX-21C LANL 1,2,3

86 Redwing Tewa 1956 JUL 20 17:46:00.0 BK 11.67390 165.33940 4.5 AW-BG WR 5000 5000 1220 TX-41? LLNL 1,2,3

87 Redwing Huron 1956 JUL 21 18:16:00.1 EN 11.67190 162.36920 AW-BG WR 250 250 XW-50? LANL 1,2,3

88 Project 57 Project 57 No. 1 1957 APR 24 14:27 NAFR 37.20000 -116.10000 13 AS SE 0 0 XW-25 LANL 1,2,3,7,h

89 Plumbbob Boltzmann 1957 MAY 28 11:55:00.2 NTS-YF 37.09470 -116.02360 7c 150 AS-T WR 12 12 XW-40 LANL 1,2,3,g

90 Plumbbob Franklin 1957 JUN 2 11:54:59.9 NTS-YF 37.04780 -116.02110 T3 90 AS-T WR 0.14 0.14 XW-30? LANL 1,2,3,g

91 Plumbbob Lassen 1957 JUN 5 11:45:00.3 NTS-YF 37.13470 -116.04080 B9a 150 A-B WR 0.0005 0.0005 LLNL 1,2,g

92 Plumbbob Wilson 1957 JUN 18 11:45:00.3 NTS-YF 37.13470 -116.04080 B9a 150 A-B WR 10 10 XW-45X1 LLNL 1,2,3,g

93 Plumbbob Priscilla 1957 JUN 24 13:30:00.1 NTS-FF 36.79810 -115.92890 ? 5 210 A-B WR 37 37 TX-15/39 pLANL 1,2,3

94 Plumbbob Coulomb-A 1957 JUL 1 17:30 NTS-YF 37.04000 -116.03000 S3h 0 AS SE 0 0 XW-31 LANL 1,2,3,7,g,h

95 Plumbbob Hood 1957 JUL 5 11:40:00.1 NTS-YF 37.13470 -116.04080 B9a 460 A-B WR 74 74 LLNL 1,2,g

96 Plumbbob Diablo 1957 JUL 15 11:30:00.1 NTS-YF 37.15030 -116.10860 T2b 150 AS-T WR 17 17 LLNL 1,2,g

97 Plumbbob John 1957 JUL 19 14:00:04.6 NTS-YF 37.16060 -116.05310 10 9140 A-R WE 2 2 W25 LANL 1,2,3

98 Plumbbob Kepler 1957 JUL 24 11:49:59.9 NTS-YF 37.09500 -116.10300 \* 4 150 AS-T WR 10 10 XW-35 pr? LANL 1,2,3,g

99 Plumbbob Owens 1957 JUL 25 13:29:59.7 NTS-YF 37.13470 -116.04080 B9a 150 A-B WR 9.7 9.7 XW-51? LLNL 1,2,3,g

100 Plumbbob Pascal-A 1957 JUL 26 08:00:00.0 NTS-YF 37.05180 -116.03340 U3j -150 1202 UG-S SE 0 20 SL 0.01 LANL 1,2

101 Plumbbob Stokes 1957 AUG 7 12:25:00.2 NTS-YF 37.08670 -116.02360 B7b 460 A-B WR 19 19 XW-30 LANL 1,2,3,g

102 Plumbbob Saturn 1957 AUG 10 00:59:55.1 NTS-RM 37.19390 -116.03330 U12c.02 -39.01 UG-T SE 0 0 XW-45X1 LLNL 1,2,3,5

103 Plumbbob Shasta 1957 AUG 18 12:00:00.0 NTS-YF 37.12800 -116.10640 2a 150 AS-T WR 17 17 LLNL 1,2,g

104 Plumbbob Doppler 1957 AUG 23 12:30:00.1 NTS-YF 37.08670 -116.02360 B7b 460 A-B WR 11 11 XW-34? LANL 1,2,3,g

105 Plumbbob Pascal-B 1957 AUG 27 22:35:00.0 NTS-YF 37.04910 -116.03400 U3d -150 1201 UG-S SE 0 20 SL 0.01 LANL 1,2,g

106 Plumbbob Franklin Prime 1957 AUG 30 12:39:59.9 NTS-YF 37.08670 -116.02360 B7b 230 A-B WR 4.7 4.7 XW-30? LANL 1,2,3,g

107 Plumbbob Smoky 1957 AUG 31 12:30:00.0 NTS-YF 37.18720 -116.06780 T2c 210 1365 AS-T WR 44 44 TX-41 pr LLNL 1,2,3,g,j

108 Plumbbob Galileo 1957 SEP 2 12:40:00.0 NTS-YF 37.05310 -116.10250 T1 150 AS-T WR 11 11 LANL 1,2,g

109 Plumbbob Wheeler 1957 SEP 6 12:45:00.0 NTS-YF 37.13470 -116.04080 B9a 150 A-B WR 0.197 0.197 XW-51? LLNL 1,2,3,g

110 Plumbbob Coulomb-B 1957 SEP 6 20:05:00.6 NTS-YF 37.04300 -116.02600 \*T? S3g 0 AS SE 0.3 0.3 XW-31 LANL 1,2,3,g

111 Plumbbob Laplace 1957 SEP 8 12:59:59.8 NTS-YF 37.08670 -116.02360 B7b 230 A-B WR 1 1 LANL 1,2,g

112 Plumbbob Fizeau 1957 SEP 14 16:44:59.8 NTS-YF 37.03360 -116.03140 T3b 150 AS-T WR 11 11 XW-34? LANL 1,2,3,g

113 Plumbbob Newton 1957 SEP 16 12:49:59.9 NTS-YF 37.08670 -116.02360 B7a 460 A-B WR 12 12 XW-31 LANL 1,2,3,g

114 Plumbbob Rainier 1957 SEP 19 16:59:59.45 NTS-RM 37.19580 -116.20310 U12b -272.8 H-24UG-T WR 1.7 1.7 W25 LLNL 1,2,3,5,g

115 Plumbbob Whitney 1957 SEP 23 12:29:59.8 NTS-YF 37.13830 -116.11750 T2 150 AS-T WR 19 19 W27 pr LLNL 1,2,3,g

116 Plumbbob Charleston 1957 SEP 28 12:59:59.9 NTS-YF 37.13470 -116.04080 B9a 460 A-B WR 12 12 LLNL 1,2,g

117 Plumbbob Morgan 1957 OCT 7 13:00:00.1 NTS-YF 37.13470 -116.04080 B9a 150 A-B WR 8 8 XW-45X1 LLNL 1,2,3,g

118 Project 58 Pascal-C 1957 DEC 6 20:15:00.0 NTS-YF 37.04990 -116.03090 U3e -80 1202 UG-S SE 0 20 SL 0.01 XW-42? LANL 1,2,3

119 Project 58 Coulomb-C 1957 DEC 9 20:00 NTS-YF 37.04000 -116.03000 S3i 0 AS SE 0.5 0.5 LANL 1,2,3,7,h

120 Project 58A Venus 1958 FEB 22 01:00:00 NTS-RM 37.11300 -116.11500 ? U12d.01 -30.48 UG-T SE 0 0.001 0.0005 XW-47 pr? LLNL 1,2,3,5,7

121 Project 58A Uranus 1958 MAR 14 22:00:00 NTS-RM 37.11300 -116.11500 ? U12c.01 -34.75 UG-T SE 0 0.001 0.0005 XW-48 LLNL 1,2,3,5,7

122 Hardtack I Yucca 1958 APR 28 02:40:00.3 -PAC 12.61670 168.02500 26210 A-B WE 1.7 1.7 W25 LANL 1,2,3

123 Hardtack I Cactus 1958 MAY 5 18:15:00.1 EN 11.55640 162.35420 1 AS WR 18 18 105 Mk-43 pr LANL 1,2,3

124 Hardtack I Fir 1958 MAY 11 17:50:00.1 BK 11.69080 165.27360 3 AW-BG WR 1360 1360 LLNL 1,2,3

125 Hardtack I Butternut 1958 MAY 11 18:15:00.1 EN 11.54110 162.35060 3 AW-BG WR 81 81 TX-46 pr? LANL 1,2,3

126 Hardtack I Koa 1958 MAY 12 18:30:00.1 EN 11.67500 162.20560 0.81 AS WR 1370 1370 1289 XW-35 LANL 1,2,3

127 Hardtack I Wahoo 1958 MAY 16 01:30:00.5 EN 11.34470 162.17890 -150 UW WE 9 9 Mk-7 LANL 1,2,3

128 Hardtack I Holly 1958 MAY 20 18:30:00.1 EN 11.54390 162.35610 4 AW-BG WR 5.9 5.9 XW-31Y3 LANL 1,2,3

129 Hardtack I Nutmeg 1958 MAY 21 21:20:00.2 BK 11.49610 165.37080 3 AW-BG WR 25.1 25.1 XW-47? LLNL 1,2,3

130 Hardtack I Yellowwood 1958 MAY 26 02:00:00.1 EN 11.66030 162.22530 3 AW-BG WR 330 330 TX-46 LANL 1,2,3

131 Hardtack I Magnolia 1958 MAY 26 18:00:00.1 EN 11.54280 162.35390 4 AW-BG WR 57 57 LANL 1,2,3

132 Hardtack I Tobacco 1958 MAY 30 02:15:00.2 EN 11.66330 162.23000 2.7 AW-BG WR 11.6 11.6 XW-50 LANL 1,2,3

133 Hardtack I Sycamore 1958 MAY 31 03:00:00.1 BK 11.69080 165.27360 3 AW-BG WR 92 92 TX-41 LLNL 1,2,3

134 Hardtack I Rose 1958 JUN 2 18:45:00.1 EN 11.54110 162.35170 4.5 AW-BG WR 15 15 XW-49 pr? LANL 1,2,3

135 Hardtack I Umbrella 1958 JUN 8 18:15:00.2 EN 11.38080 162.21920 -50 UW WE 8 8 915 Mk-7 LANL 1,2,3

136 Hardtack I Maple 1958 JUN 10 17:30:00.1 BK 11.68720 165.41500 3 AW-BG WR 213 213 LLNL 1,2,3

137 Hardtack I Aspen 1958 JUN 14 17:30:00.1 BK 11.69080 165.27330 3 AW-BG WR 319 319 XW-47? LLNL 1,2,3

138 Hardtack I Walnut 1958 JUN 14 18:30:00.1 EN 11.66030 162.22530 2 AW-BG WR 1450 1450 LANL 1,2,3

139 Hardtack I Linden 1958 JUN 18 03:00:00.1 EN 11.54420 162.35640 2.5 AW-BG WR 11 11 XW-50 pr? LANL 1,2,3

140 Hardtack I Redwood 1958 JUN 27 17:30:00.1 BK 11.68720 165.41500 3 AW-BG WR 412 412 XW-47? LLNL 1,2,3

141 Hardtack I Elder 1958 JUN 27 18:30:00.1 EN 11.66330 162.23000 2.7 AW-BG WR 880 880 TX-43 LANL 1,2,3

142 Hardtack I Oak 1958 JUN 28 19:30:00.1 EN 11.60780 162.10780 1.8 AW-BG WR 8900 8900 1750 TX-46/53 LANL 1,2,3

143 Hardtack I Hickory 1958 JUN 29 00:00:00.1 BK 11.49610 162.37080 3 AW-BG WR 14 14 XW-47 pr? LLNL 1,2,3

144 Hardtack I Sequoia 1958 JUL 1 18:30:00.1 EN 11.54420 162.35640 2 AW-BG WR 5.2 5.2 LANL 1,2,3

145 Hardtack I Cedar 1958 JUL 2 17:30:00.1 BK 11.69080 165.27360 3.4 AW-BG WR 220 220 LLNL 1,2,3

146 Hardtack I Dogwood 1958 JUL 5 18:30:00.2 EN 11.66330 162.23000 3 AW-BG WR 397 397 XW-47? LLNL 1,2,3

147 Hardtack I Poplar 1958 JUL 12 03:30:00.1 BK 11.68810 165.26440 3 AW-BG WR 9300 9300 TX-41 LLNL 1,2,3

148 Hardtack I Scaevola 1958 JUL 14 04:00 EN 11.55000 162.36000 \* 6 AW-BG SE 0 0 XW-34 LANL 1,2,3,7

149 Hardtack I Pisonia 1958 JUL 17 23:00 EN 11.55000 162.31000 \* 2 AW-BG WR 255 255 XW-50? LANL 1,2,3,7

150 Hardtack I Juniper 1958 JUL 22 04:20:00.1 BK 11.49610 165.37080 3 AW-BG WR 65 65 XW-47 pr? LLNL 1,2,3

151 Hardtack I Olive 1958 JUL 22 20:30:00.2 EN 11.66330 162.23000 3 AW-BG WR 202 202 LLNL 1,2,3

152 Hardtack I Pine 1958 JUL 26 20:30:00.2 EN 11.65610 162.21970 3 AW-BG WR 2000 2000 TX-41 LLNL 1,2,3

153 Newsreel Teak 1958 AUG 1 10:50:05.6 JO 16.74390 -169.53330 76800 AH-R WE 3800 3800 W39 LANL 1,2,3

154 Hardtack I Quince 1958 AUG 6 02:15 EN 11.55000 162.36000 \* 1 AS WR 0 0 XW-51? LLNL 1,2,3,7

155 Newsreel Orange 1958 AUG 12 10:30:08.6 JO 16.35830 -169.53560 43000 AH-R WE 3800 3800 W39 LANL 1,2,3

156 Hardtack I Fig 1958 AUG 18 04:00 EN 11.55000 162.36000 \* 0.5 AS WR 0.02 0.02 3 XW-51? LLNL 1,2,3,7

157 Argus Argus I 1958 AUG 27 02:28 -SATL -38.50000 -11.50000 LT 200000 AX-R WE 1 2 1.5 W25 LANL 1,2,3,7,a,ap

158 Argus Argus II 1958 AUG 30 03:18 -SATL -49.50000 -8.20000 LT 240000 AX-R WE 1 2 1.5 W25 LANL 1,2,3,7,a,ap

159 Argus Argus III 1958 SEP 6 22:13 -SATL -48.50000 -9.70000 LT 540000 AX-R WE 1 2 1.5 W25 LANL 1,2,3,7,a,ap

160 Hardtack II Otero 1958 SEP 12 20:00:00.2 NTS-YF 37.05000 -116.03190 U3q -150 1202 UG-S SE 0.038 0.038 XW-54? LANL 1,2,3

161 Hardtack II Bernalillo 1958 SEP 17 19:30:00.2 NTS-YF 37.04940 -116.03300 U3n -150 1201 UG-S SE 0.015 0.015 LANL 1,2

162 Hardtack II Eddy 1958 SEP 19 14:00:00.2 NTS-YF 37.08670 -116.02360 7 150 A-B WR 0.083 0.083 LANL 1,2

163 Hardtack II Luna 1958 SEP 21 19:00:00.2 NTS-YF 37.04920 -116.03360 U3m -150 1201 UG-S SE 0.0015 0.0015 XW-54? LANL 1,2,3

164 Hardtack II Mercury 1958 SEP 23 22:00:00.0 NTS-RM 37.19310 -116.20060 ?? U12f.01 -55.78 2021 UG-T SE 0 20 SL 0.01 XW-47 pr? LLNL 1,2,3,5

165 Hardtack II Valencia 1958 SEP 26 20:00:00.2 NTS-YF 37.04970 -116.02970 U3r -150 1201 UG-S SE 0.002 0.002 XW-42? LANL 1,2,3

166 Hardtack II Mars 1958 SEP 28 00:00:00.2 NTS-RM 37.19310 -116.20060 U12f.02 -42.67 2021 UG-T SE 0.013 0.013 XW-48 LLNL 1,2,3,5

167 Hardtack II Mora 1958 SEP 29 14:05:00.1 NTS-YF 37.08670 -116.02360 7 460 A-B WR 2 2 LANL 1,2

168 Hardtack II Hidalgo 1958 OCT 5 14:10:00.1 NTS-YF 37.08670 -116.02360 7 110 A-B SE 0.077 0.077 LANL 1,2

169 Hardtack II Colfax 1958 OCT 5 16:15:00.2 NTS-YF 37.04890 -116.03420 U3k -150 1201 UG-S SE 0.0055 0.0055 LANL 1,2

170 Hardtack II Tamalpais 1958 OCT 8 22:00:00.13 NTS-RM 37.19530 -116.20030 U12b.02 -124.05 2000 UG-T WR 0.072 0.072 XW-48 LLNL 1,2,3,5

171 Hardtack II Quay 1958 OCT 10 14:30:00.1 NTS-YF 37.09470 -116.02360 7 30 AS-T WR 0.079 0.079 XW-50 pr? LANL 1,2,3

172 Hardtack II Lea 1958 OCT 13 13:20:00.1 NTS-YF 37.08670 -116.02360 7 460 A-B WR 1.4 1.4 XW-54? LANL 1,2,3

173 Hardtack II Neptune 1958 OCT 14 18:00:00.2 NTS-RM 37.19390 -116.19970 U12c.03 -30.02 2045 UG-T SE 0.115 0.115 C LLNL 1,2,5

174 Hardtack II Hamilton 1958 OCT 15 16:00:00.2 NTS-FF 36.80220 -115.93220 5 20 AS-T WR 0.0012 0.0012 XW-51? LLNL 1,2,3

175 Hardtack II Logan 1958 OCT 16 06:00:00.14 NTS-RM 37.18420 -116.20110 A12e.02 -283.58 UG-T WR 5 5 LLNL 1,2,5

176 Hardtack II Dona Ana 1958 OCT 16 14:20:00.1 NTS-YF 37.08670 -116.02360 7 150 A-B WR 0.037 0.037 LANL 1,2

177 Hardtack II Vesta 1958 OCT 17 23:00:00.2 NTS-YF 37.12250 -116.03470 S9e 0 AS SE 0.024 0.024 XW-47 pr LLNL 1,2,3

178 Hardtack II Rio Arriba 1958 OCT 18 14:25:00.1 NTS-YF 37.04110 -116.02580 3 20 AS-T WR 0.09 0.09 Mk-7 LANL 1,2,3

179 Hardtack II San Juan 1958 OCT 20 14:30:00.2 NTS-YF 37.04470 -116.02970 U3p 20 1201 UG-S SE 0 0 XW-42? LANL 1,2,3

180 Hardtack II Socorro 1958 OCT 22 13:30:00.2 NTS-YF 37.08670 -116.02360 7 460 A-B WR 6 6 XW-54? LANL 1,2,3

181 Hardtack II Wrangell 1958 OCT 22 16:50:00.1 NTS-FF 36.79810 -115.92890 5 460 A-B WR 0.115 0.115 XW-47? LLNL 1,2,3

182 Hardtack II Oberon 1958 OCT 22 20:30 NTS-YF 37.20000 -116.10000 \* 8 8 AS-T SE 0 0 XW-47 pr? LANL 1,2,3,f

183 Hardtack II Rushmore 1958 OCT 22 23:40:00.1 NTS-YF 37.13470 -116.04080 9 150 A-B WR 0.188 0.188 XW-47 pr? LLNL 1,2,3

184 Hardtack II Catron 1958 OCT 24 15:00:00.2 NTS-YF 37.04310 -116.02690 3 20 AS-T SE 0.021 0.021 LANL 1,2

185 Hardtack II Juno 1958 OCT 24 16:01:00.2 NTS-YF 37.12330 -116.03780 S9f 0 AS SE 0.0017 0.0017 LLNL 1,2,3

186 Hardtack II Ceres 1958 OCT 26 04:00:00.2 NTS-YF 37.18140 -116.06860 8 10 AS-T SE 0.0007 0.0007 XW-48 AFAPLLNL 1,2,3

187 Hardtack II Sanford 1958 OCT 26 10:20:00.1 NTS-FF 36.79810 -115.92890 5 460 A-B WR 4.9 4.9 XW-47 pr? LLNL 1,2,3

188 Hardtack II De Baca 1958 OCT 26 16:00:00.1 NTS-YF 37.08670 -116.02360 7 460 A-B WR 2.2 2.2 LANL 1,2

189 Hardtack II Chavez 1958 OCT 27 14:30 NTS-YF 37.05000 -116.00000 \* 3 16 AS-T SE 0.0006 0.0006 LANL 1,2,3,f

190 Hardtack II Evans 1958 OCT 29 00:00:00.15 NTS-RM 37.19470 -116.20470 U12b.04 -256.03 2000 UG-T WR 0.055 0.055 XW-47 pr? LLNL 1,2,3,5

191 Hardtack II Mazama 1958 OCT 29 11:20 NTS-YF 37.10000 -116.05000 \* 9 15 AS-T WR 0 0 LLNL 1,2,3,f

192 Hardtack II Humboldt 1958 OCT 29 14:45:00.1 NTS-YF 37.04780 -116.02470 3 10 AS-T WR 0.0078 0.0078 XW-51? LLNL 1,2,3

193 Hardtack II Santa Fe 1958 OCT 30 03:00:00.1 NTS-YF 37.08670 -116.02360 7 460 A-B WR 1.3 1.3 LANL 1,2

194 Hardtack II Ganymede 1958 OCT 30 11:00 NTS-YF 37.10000 -116.05000 \* S9g 0 AS SE 0 0 W45 LLNL 1,2,3,f

195 Hardtack II Blanca 1958 OCT 30 15:00:00.15 NTS-RM 37.18580 -116.20190 U12e.05 -254.51 2145 UG-T WR 22 22 W47 pr LLNL 1,2,3,5

196 Hardtack II Titania 1958 OCT 30 20:34:00.2 NTS-YF 37.17720 -116.06920 8 10 AS-T SE 0.0002 0.0002 W47 pr LLNL 1,2,3

197 Nougat Antler 1961 SEP 15 17:00:00.12 NTS-RM 37.18794 -116.20775 U12e.03a -402.03 2254 UG-T WR 2.6 2.6 4.70 V 210 kCi W45 LLNL 1,2,3,5,8

198 Nougat Shrew 1961 SEP 16 19:45:00.12 NTS-YF 37.04844 -116.03281 U3ac -98.07 1200 UG-S WR 0 20 V <490 Ci XW-54? LANL 1,2,3,5,8

199 Nougat Boomer 1961 OCT 1 21:30:00.12 NTS-YF 37.04834 -116.03451 U3aa -100.64 1200 UG-S WR 0 20 V <2.5 kCi XW-54? LANL 1,2,3,5,8

200 Nougat Chena 1961 OCT 10 18:00:00.13 NTS-RM 37.19428 -116.20703 U12b.09 -255.42 2250 UG-T WR 0 20 V 760 Ci W44? LLNL 1,2,3,5,8

201 Nougat Mink 1961 OCT 29 18:30:00.13 NTS-YF 37.04856 -116.03108 U3ae -192.1 1201 UG-S WR 0 20 V LANL 1,2,5,8

202 Nougat Fisher 1961 DEC 3 23:04:59.63 NTS-YF 37.04586 -116.02767 U3ah -363.72 1198 UG-S WR 13.4 13.4 183 V <500 Ci XW-50 pr? LANL 1,2,3,5,6,8

203 Nougat Gnome 1961 DEC 10 19:00:00.0 -NM 32.26360 -103.86580 -360 1013 UG-S PR 3 3 V LLNL 1,2,8

204 Nougat Mad 1961 DEC 13 18:00:00.16 NTS-YF 37.12661 -116.04875 U9a -219.15 1254 H-18UG-S WR 0.5 0.5 3.40 V LLNL 1,2,5,8

205 Nougat Ringtail 1961 DEC 17 16:35:00.13 NTS-YF 37.04317 -116.02531 U3ak -362.99 1196 UG-S WR 0 20 20 237 V <10 Ci XW-54? LANL 1,2,3,5,6,8

206 Nougat Feather 1961 DEC 22 16:30:00.13 NTS-RM 37.19494 -116.20828 U12b.08 -247.5 2242 UG-T WR 0.15 0.15 V 380 Ci LLNL 1,2,5,8

207 Nougat Stoat 1962 JAN 9 16:30:00.14 NTS-YF 37.04464 -116.03506 U3ap -302.33 1198 UG-S WR 5.1 5.1 4.20 183 V 8 Ci LANL 1,2,3,5,6,8

208 Nougat Agouti 1962 JAN 18 18:00:00.13 NTS-YF 37.04725 -116.03436 U3ao -260.95 1200 UG-S WR 6.4 6.4 4.50 184 LANL 1,2,3,5,6

209 Nougat Dormouse 1962 JAN 30 18:00:00.13 NTS-YF 37.04683 -116.03947 U3aq -363.14 1200 UG-S WR 0 20 10 167 V LANL 1,2,3,5,6,8

210 Nougat Stillwater 1962 FEB 8 18:00:00.16 NTS-YF 37.12725 -116.05267 U9c -181.36 1259 UG-S WR 3.07 3.07 124 V LLNL 1,2,3,5,6,8

211 Nougat Armadillo 1962 FEB 9 16:30:00.13 NTS-YF 37.04358 -116.03894 U3ar -239.69 1198 UG-S WR 7.1 7.1 180 V <120 Ci LANL 1,2,3,5,6,8

212 Nougat Hard Hat 1962 FEB 15 18:00:00.10 NTS-15 37.22500 -116.05800 U15a -287.43 1532 UG-S WE 5.7 51 S 5.7 V LANL 1,2,5,8,q

213 Nougat Chinchilla I 1962 FEB 19 16:30:00.13 NTS-YF 37.04906 -116.02953 U3ag -150.08 1201 UG-S WR 1.9 1.9 4.20 92 V 2 Ci LANL 1,2,3,5,6,8

214 Nougat Codsaw 1962 FEB 19 17:50:00.16 NTS-YF 37.12744 -116.03711 U9g -212.14 1258 UG-S WR 0 20 2 70 V LLNL 1,2,3,5,6,8

215 Nougat Cimarron 1962 FEB 23 18:00:00.16 NTS-YF 37.12886 -116.04831 U9h -304.8 1256 UG-S WR 11.9 11.9 148 V 750 Ci LLNL 1,2,3,5,6,8

216 Nougat Platypus 1962 FEB 24 16:30:00.13 NTS-YF 37.04833 -116.03192 U3ad -57.84 1200 CR WR 0 20 V LANL 1,2,5,8

217 Nougat Danny Boy 1962 MAR 5 18:15:00.12 NTS-18 37.11110 -116.36490 U18a -30 1641 UG-S WE 0.43 0.43 3.60 81 V 850 kCi LLNL 1,2,3,6,8

218 Nougat Ermine 1962 MAR 6 16:30:00.13 NTS-YF 37.04839 -116.03367 U3ab -73.15 1201 UG-S SE 0 20 V LANL 1,2,5,8

219 Nougat Brazos 1962 MAR 8 18:00:00.21 NTS-YF 37.12217 -116.04889 U9d -256.34 1254 UG-S WR 8.4 8.4 142 V 1.1 kCi XW-55 pr? LLNL 1,2,3,5,6,8

220 Nougat Hognose 1962 MAR 15 16:30:00.13 NTS-YF 37.04397 -116.03103 U3ai -240.33 1198 UG-S WR 0 20 8 146 V LANL 1,2,3,5,6,8

221 Nougat Hoosic 1962 MAR 28 18:00:00.16 NTS-YF 37.12431 -116.03389 U9j -186.84 1264 UG-S WR 3.4 3.4 90 V 10 kCi W45? LLNL 1,2,3,5,6,8

222 Nougat Chinchilla II 1962 MAR 31 18:00:00.13 NTS-YF 37.04692 -116.03689 U3as -136.67 1200 UG-S WR 0 20 2 72 V <10 Ci LANL 1,2,3,5,6,8

223 Nougat Dormouse Prime 1962 APR 5 18:00:00.13 NTS-YF 37.04450 -116.02353 U3az -261.03 1197 UG-S WR 10.6 10.6 4.30 164 V LANL 1,2,3,5,6,8

224 Nougat Passaic 1962 APR 6 18:00:00.16 NTS-YF 37.11767 -116.04400 U9l -233.48 1248 UG-S WR 0 20 9 156 V 600 Ci LLNL 1,2,3,5,6,8

225 Nougat Hudson 1962 APR 12 18:00:00.16 NTS-YF 37.12717 -116.04486 U9n -150.88 1253 UG-S WR 0 20 1 6 V 500 Ci W45? LLNL 1,2,3,5,6,8

226 Nougat Platte 1962 APR 14 18:00:00.13 NTS-RM 37.22203 -116.15744 U12k.01 -170.69 1695 UG-T WR 1.85 1.85 V 1.9 MCi LLNL 1,2,5,8

227 Nougat Dead 1962 APR 21 18:40:00.16 NTS-YF 37.11900 -116.03150 U9k -193.24 1272 UG-S WR 0 20 3 78 V 40 kCi LLNL 1,2,3,5,6,8

228 Dominic I Adobe 1962 APR 25 15:46 LI-CH 1.60000 -157.30000 \* 884 0 A-AD WR 190 190 W50 LANL 1,2,3,7,c

229 Dominic I Aztec 1962 APR 27 16:02 LI-CH 1.60000 -157.30000 \* 796 0 A-AD WR 410 410 W50 LANL 1,2,3,7,c

230 Nougat Black 1962 APR 27 18:00:00.16 NTS-YF 37.11844 -116.03778 U9p -217.63 1259 UG-S WR 0 20 5 124 V 150 Ci LLNL 1,2,3,5,6,8

231 Dominic I Arkansas 1962 MAY 2 18:02 LI-CH 1.60000 -157.30000 \* 1533 0 A-AD WR 1090 1090 XW-56X2 LLNL 1,2,3,7,c

232 Dominic I Questa 1962 MAY 4 19:05 LI-CH 1.60000 -157.30000 \* 1594 0 A-AD WR 670 670 XW-59 LANL 1,2,3,7,c

233 Dominic I Frigate Bird 1962 MAY 6 23:30 -PAC 4.83330 -149.41670 3350 A-R WR 200 1000 600 600 W47Y1 LLNL 1,2,3,7

234 Nougat Paca 1962 MAY 7 19:33:00.14 NTS-YF 37.04656 -116.02500 ? U3ax -258.32 1199 UG-S WR 0 20 8 148 V <10 Ci LANL 1,2,3,5,6,8

235 Dominic I Yukon 1962 MAY 8 18:01 LI-CH 1.60000 -157.30000 \* 878 0 A-AD WR 100 100 LLNL 1,2,3,7,c

236 Dominic I Mesilla 1962 MAY 9 17:01 LI-CH 1.60000 -157.30000 \* 747 0 A-AD WR 100 100 Mk-15-0 LANL 1,2,3,7,c

237 Nougat Arikaree 1962 MAY 10 15:00:00.16 NTS-YF 37.12759 -116.04830 U9r -166.73 1254 UG-S WR 0 20 V 2 kCi W45? LLNL 1,2,3,5,8

238 Dominic I Muskegon 1962 MAY 11 15:37 LI-CH 1.60000 -157.30000 \* 913 0 A-AD WR 50 50 LLNL 1,2,3,7,c

239 Dominic I Swordfish 1962 MAY 11 20:02:05.9 -PAC 31.24500 -124.21170 -198 0 UW WE 0 20 W44 LANL 1,2,3,c

240 Dominic I Encino 1962 MAY 12 17:03 LI-CH 1.60000 -157.30000 \* 1679 0 A-AD WR 500 500 XW-43Y5 LANL 1,2,3,7,c

241 Nougat Aardvark 1962 MAY 12 19:00:00.10 NTS-YF 37.06519 -116.03039 U3am(s) -434.04 1214 UG-S WR 40 7 S 40 4.60 282 V <10 Ci TX-33Y2 AFLANL 1,2,3,5,6,8,q

242 Dominic I Swanee 1962 MAY 14 15:22 LI-CH 1.60000 -157.30000 \* 896 0 A-AD WR 97 97 XW-56 LLNL 1,2,3,7,c

243 Nougat Eel 1962 MAY 19 15:00:00.16 NTS-YF 37.12483 -116.05200 U9m -217.63 1253 UG-S WR 4.5 4.5 71 V 1.9 MCi LLNL 1,2,3,5,6,8

244 Dominic I Chetco 1962 MAY 19 15:37 LI-CH 1.60000 -157.30000 \* 2105 0 A-AD WR 73 73 LLNL 1,2,3,7,c

245 Nougat White 1962 MAY 25 15:00:00.15 NTS-YF 37.12483 -116.05200 U9b -192.63 1253 UG-S WR 0 20 8 149 V 1.6 kCii XW-58 pr? LLNL 1,2,3,5,6,8

246 Dominic I Tanana 1962 MAY 25 16:09 LI-CH 1.60000 -157.30000 \* 2752 0 A-AD WR 2.6 2.6 LLNL 1,2,3,7,c

247 Dominic I Nambe 1962 MAY 27 17:03 LI-CH 1.60000 -157.30000 \* 2176 0 A-AD WR 43 43 Mk-15-0 LANL 1,2,3,7,c

248 Nougat Raccoon 1962 JUN 1 17:00:00.14 NTS-YF 37.04561 -116.03447 U3ajs -164.25 1199 UG-S WR 0 20 3 96 LANL 1,2,3,5,6

249 Nougat Packrat 1962 JUN 6 17:00:00.12 NTS-YF 37.04572 -116.03928 U3aw -261.98 1199 UG-S WR 0 20 13 182 V LANL 1,2,3,5,6,8

250 Dominic I Alma 1962 JUN 8 17:03 LI-CH 1.50000 -157.20000 \* 2702 0 A-AD WR 782 782 Mk-59 LANL 1,2,3,7,c

251 Dominic I Truckee 1962 JUN 9 15:37 LI-CH 1.60000 -157.30000 \* 2125 0 A-AD WR 210 210 XW-58 LLNL 1,2,3,7,c

252 Dominic I Yeso 1962 JUN 10 17:01 LI-CH 1.50000 -157.20000 \* 2537 0 A-AD WR 3000 3000 LANL 1,2,3,7,c

253 Dominic I Harlem 1962 JUN 12 15:37 LI-CH 1.50000 -157.20000 \* 4160 0 A-AD WR 1200 1200 W47Y2 LLNL 1,2,3,7,c

254 Nougat Des Moines 1962 JUN 13 21:00:00.12 NTS-RM 37.22222 -116.16214 U12j.01 -185.93 1696 UG-T WR 2.9 2.9 V 11 MCi LLNL 1,2,5,8

255 Dominic I Rinconada 1962 JUN 15 16:01 LI-CH 1.50000 -157.20000 \* 2775 0 A-AD WR 800 800 Mk-15-2 LANL 1,2,3,7,c

256 Dominic I Dulce 1962 JUN 17 16:01 LI-CH 1.60000 -157.30000 \* 2771 0 A-AD WR 52 52 LANL 1,2,3,7,c

257 Dominic I Petit 1962 JUN 19 15:01 LI-CH 1.60000 -157.30000 \* 4570 0 A-AD WR 2.2 2.2 LLNL 1,2,3,7,c

258 Nougat Daman I 1962 JUN 21 17:00:00.13 NTS-YF 37.04306 -116.03025 U3be -260.4 1197 UG-S WR 0 20 11 169 V LANL 1,2,3,5,6,8

259 Dominic I Otowi 1962 JUN 22 16:01 LI-CH 1.60000 -157.30000 \* 2746 0 A-AD WR 81.5 81.5 Mk-15-2 LANL 1,2,3,7,c

260 Dominic I Bighorn 1962 JUN 27 15:19 LI-CH 1.30000 -157.30000 \* 3600 0 A-AD WR 7650 7650 LLNL 1,2,3,7,c

261 Nougat Haymaker 1962 JUN 27 18:00:00.12 NTS-YF 37.04158 -116.03525 U3au(s) -408.56 1196 UG-S WR 67 16 S 67 4.90 297 V <150 Ci LANL 1,2,3,5,6,8,q

262 Nougat Marshmallow 1962 JUN 28 17:00:00.11 NTS-16 37.00911 -116.20106 U16a -310.9 2241 UG-T WE 0 20 V 35 kCi LLNL 1,2,5,8

263 Dominic I Bluestone 1962 JUN 30 15:21 LI-CH 1.50000 -157.30000 \* 1518 0 A-AD WR 1270 1270 XW-56X2 LLNL 1,2,3,7,c

264 Nougat Sacramento 1962 JUN 30 21:30:00.16 NTS-YF 37.11742 -116.04742 U9v -149.05 1246 UG-S WR 0 20 4 109 V LLNL 1,2,3,5,6,8

265 Storax Sedan 1962 JUL 6 17:00:00.15 NTS-YF 37.17700 -116.04540 U10h -190 1289 CR PR 104 104 4.40 390 V 15 MTC LLNL 1,2,3,6,8

266 Sunbeam Little Feller II 1962 JUL 7 19:00 NTS-18 37.12000 -116.30000 \* 18 1 AS WE 0 20 W54 SNL 1,2,3,7

267 Fishbowl Starfish Prime 1962 JUL 9 09:00 JO 17.20000 -169.10000 399000 AX-R WE 1400 1400 W49 LANL 1,2,3,7,c

268 Dominic I Sunset 1962 JUL 10 16:33 LI-CH 1.60000 -157.30000 \* 1500 0 A-AD WR 1000 1000 XW-59 LANL 1,2,3,7,c

269 Dominic I Pamlico 1962 JUL 11 15:37 LI-CH 1.40000 -157.30000 \* 4370 0 A-AD WR 3880 3880 LLNL 1,2,3,7,c

270 Sunbeam Johnnie Boy 1962 JUL 11 16:45:00.09 NTS-18 37.12240 -116.33300 18 -0.6 1544 CR WE 0.5 0.5 V W30 TADM LLNL 1,2,3,8

271 Storax Merrimac 1962 JUL 13 16:00:00.15 NTS-YF 37.05506 -116.03339 U3bd -413.31 1205 UG-S WR 20 200 4 S 20 4.40 207 V 22 kCi LLNL 1,2,5,6,8,q

272 Sunbeam Small Boy 1962 JUL 14 18:30 NTS-FF 36.80000 -115.95000 \* 5 3 AS-T WE 0 20 0.6 3.70 LANL 1,2,3,7

273 Sunbeam Little Feller I 1962 JUL 17 17:00 NTS-18 37.11000 -116.31000 \* 18 12 AS WE 0 20 W54 SNL 1,2,3,7

274 Storax Wichita 1962 JUL 27 21:00:00.16 NTS-YF 37.12972 -116.05647 U9y -150.27 1265 UG-S WR 0 20 3.5 4.30 104 V 760 Ci LLNL 1,2,5,6,8

275 Storax York 1962 AUG 24 15:00:00.15 NTS-YF 37.11864 -116.03947 U9z -226.47 1256 UG-S WR 0 20 5 4.40 150 V 120 kCi LLNL 1,2,5,6,8

276 Storax Bobac 1962 AUG 24 17:00:00.13 NTS-YF 37.04614 -116.02383 U3bl -206.03 1199 UG-S WR 0 20 2.5 4.20 120 V LANL 1,2,5,6,8

277 Storax Raritan 1962 SEP 6 17:00:00.16 NTS-YF 37.13031 -116.04474 U9u -157.28 1254 UG-S WR 0 20 2 60 V 1.2 kCi LLNL 1,2,5,8,af

278 Storax Hyrax 1962 SEP 14 17:10:00.12 NTS-YF 37.04394 -116.02111 U3bh -216.69 1197 UG-S WR 0 20 5 4.40 155 V LANL 1,2,5,6,8

279 Storax Peba 1962 SEP 20 17:00:00.12 NTS-YF 37.05506 -116.02928 U3bb -241.38 1205 UG-S WR 0 20 11 171 LANL 1,2,5,6

280 Storax Allegheny 1962 SEP 29 17:00:00.15 NTS-YF 37.11670 -116.03280 U9x -210.92 1271 UG-S WR 0 20 1 34 V 1.5 kCi LLNL 1,2,5,6,8

281 Dominic I Androscoggin 1962 OCT 2 16:18 JO 14.00000 -172.00000 \* 3130 0 A-AD WR 75 63 75 LLNL 1,2,3,c,s

282 Storax Mississippi 1962 OCT 5 17:00:00.16 NTS-YF 37.13942 -116.05033 U9ad -493.78 1264 UG-S WR 115 22 S 115 5.06 259 V 4.9 kCi LLNL 1,2,5,6,8,q

283 Dominic I Bumping 1962 OCT 6 16:03 JO 15.00000 -169.00000 \* 3050 0 A-AD WR 11.3 11.9 11.3 LLNL 1,2,3,c,s

284 Storax Roanoke 1962 OCT 12 15:00:00.16 NTS-YF 37.12275 -116.05081 U9q -154.53 1252 H-18UG-S WR 0 20 7 142 V 1.2 kCi LLNL 1,2,5,6,8

285 Storax Wolverine 1962 OCT 12 17:00:00.12 NTS-YF 37.04878 -116.03256 U3av -73.43 1200 UG-S WR 0 20 V <100 Ci LANL 1,2,5,8

286 Dominic I Chama 1962 OCT 18 16:01 JO 14.00000 -169.00000 \* 3650 0 A-AD WR 1590 1700 1590 LANL 1,2,3,c,s

287 Storax Tioga 1962 OCT 18 15:00:00.15 NTS-YF 37.12855 -116.04024 U9f -59.44 1254 UG-S WR 0 20 LLNL 1,2,5

288 Storax Bandicoot 1962 OCT 19 18:00:00.08 NTS-YF 37.03953 -116.02114 U3bj -241.3 1195 UG-S WR 12.5 12.5 185 V 3 MCi LANL 1,2,5,6,8

289 Fishbowl Checkmate 1962 OCT 20 07:30 JO 16.00000 -169.50000 \* 147000 AX-R WE 0 20 XW-50X1 LANL 1,2,3,c

290 Fishbowl Bluegill 3 Prime 1962 OCT 26 08:59 JO 16.90000 -169.20000 \* 48200 AH-R WE 200 1000 \* 400 W50 LANL 1,2,3,c

291 Storax Santee 1962 OCT 27 15:00:00.15 NTS-YF 37.14931 -116.05350 U10f -319.43 1270 UG-S WR 0 20 5 120 V 4 kCi LLNL 1,2,5,6,8

292 Dominic I Calamity 1962 OCT 27 15:46 JO 15.00000 -169.00000 \* 3590 0 A-AD WR 800 780 800 LLNL 1,2,3,c,s

293 Dominic I Housatonic 1962 OCT 30 16:02 JO 13.50000 -172.00000 \* 3700 0 A-AD WR 8300 9960 8300 LLNL 1,2,3,c,s

294 Fishbowl Kingfish 1962 NOV 1 11:10 JO 16.60000 -169.40000 \* 96300 AX-R WE 200 1000 \* 400 W50 LANL 1,2,3,c

295 Fishbowl Tightrope 1962 NOV 4 06:30 JO 17.10000 -169.10000 \* 21000 A-R WE 0 20 W31 LANL 1,2,3,c

296 Storax St. Lawrence 1962 NOV 9 18:00:00.16 NTS-YF 37.16382 -116.07329 U2b -166.42 1309 UG-S WR 0 20 V 6 kCi LLNL 1,2,5,8

297 Storax Gundi 1962 NOV 15 16:30:00.08 NTS-YF 37.04175 -116.02387 U3bm -241.44 1195 UG-S WR 0 20 LANL 1,2,5

298 Storax Anacostia 1962 NOV 27 18:00:00.14 NTS-YF 37.12281 -116.02900 U9i -227.69 1274 UG-S PR 5.2 5.2 140 V 6.8 kCi LLNL 1,2,5,6,8

299 Storax Taunton 1962 DEC 4 16:00:00.15 NTS-YF 37.12808 -116.05001 U9aa -227.84 1256 UG-S WR 0 20 V 4 kCi LLNL 1,2,5,8

300 Storax Madison 1962 DEC 12 17:25:00.12 NTS-RM 37.16867 -116.20608 U12g.01 -245.36 2252 H-40UG-T WR 0 20 V 20 kCi LLNL 1,2,5,8

301 Storax Numbat 1962 DEC 12 18:45:00.12 NTS-YF 37.04611 -116.01561 U3bu -231.95 1201 UG-S WR 0 20 11 171 V LANL 1,2,5,6,8

302 Storax Manatee 1962 DEC 14 18:00:00.16 NTS-YF 37.12424 -116.03996 U9af -58.52 1254 UG-S WR 0 20 V 1.8 kCi LLNL 1,2,5,8

303 Storax Casselman 1963 FEB 8 16:00:00.16 NTS-YF 37.14886 -116.05189 U10g -302.97 1268 UG-S WR 0 20 6 136 V 6.3 kCi LLNL 1,2,5,6,8

304 Storax Hatchie 1963 FEB 8 16:00:01.15 NTS-YF 37.12596 -116.03865 U9e -60.96 1256 UG-S WR 0 20 LLNL 1,2,5

305 Storax Ferret 1963 FEB 8 18:30:00.13 NTS-YF 37.05834 -116.02926 U3bf -325.69 1208 UG-S WR 0 20 LANL 1,2,5

306 Storax Acushi 1963 FEB 8 18:30:00.14 NTS-YF 37.04614 -116.02108 U3bg -260.87 1199 UG-S WR 0 20 9 157 LANL 1,2,5,6

307 Storax Chipmunk 1963 FEB 15 17:00:00.13 NTS-YF 37.04901 -116.03175 U3ay -59.38 1201 UG-S SE 0 20 LANL 1,2,5

308 Storax Kaweah 1963 FEB 21 19:47:00.14 NTS-YF 37.12031 -116.04572 U9ab -227.08 1249 UG-S PR 3 3 V 40 kCi LLNL 1,2,5,8

309 Storax Carmel 1963 FEB 21 19:47:08.63 NTS-YF 37.15481 -116.07989 U2h -163.37 1311 UG-S WR 0 20 V 7.2 kCi LLNL 1,2,5,8

310 Storax Jerboa 1963 MAR 1 19:00:00.12 NTS-YF 37.04457 -116.02650 ? U3at -301.16 1197 UG-S WR 0 20 LANL 1,2,5

311 Storax Toyah 1963 MAR 15 16:22:53.14 NTS-YF 37.12583 -116.04478 U9ac -130.76 1252 UG-S WR 0 20 V 1.2 kCi LLNL 1,2,5,8

312 Storax Gerbil 1963 MAR 29 15:49:00.12 NTS-YF 37.04172 -116.01839 U3bp -279.5 1196 UG-S WR 0 20 11 168 LANL 1,2,5,6

313 Storax Ferret Prime 1963 APR 5 17:52:00.13 NTS-YF 37.03733 -116.02392 U3by -241.55 1193 UG-S WR 0 20 7 144 LANL 1,2,5,6

314 Storax Coypu 1963 APR 10 16:01:30.12 NTS-YF 37.04881 -116.03031 U3af -74.6 1201 UG-S SE 0 20 LANL 1,2,5

315 Storax Cumberland 1963 APR 11 16:03:00.16 NTS-YF 37.15668 -116.07096 U2e -227.08 1299 UG-S WR 0 20 6 130 V 8.5 kCi LLNL 1,2,5,8,af

316 Storax Kootanai 1963 APR 24 16:09:30.141 NTS-YF 37.12060 -116.03628 U9w -181.97 1261 UG-S WR 0 20 V 410 Ci LLNL 1,2,5,8

317 Storax Paisano 1963 APR 24 16:09:30.142 NTS-YF 37.12053 -116.03618 U9w1 -56.69 1261 UG-S WR 0 20 LLNL 1,2,5

318 Storax Gundi Prime 1963 MAY 9 18:19:00 NTS-YF 37.04940 -116.01559 U3db -271.73 1205 UG-S WR 0 20 8 150 LANL 1,2,5,af

319 Roller Coaster Double Tracks 1963 MAY 15 09:55 NAFR 37.20000 -116.10000 \* 0 AS ST 0 0 UK 1,2,7,8

320 Storax Harkee 1963 MAY 17 14:55:00.0 NTS-YF 37.04391 -116.03236 ? U3bv -241.42 1200 UG-S WR 0 20 LANL 1,2,5

321 Storax Tejon 1963 MAY 17 14:55:00.0 NTS-YF 37.04834 -116.01563 ? U3cg -74.6 1199 UG-S SE 0 20 LANL 1,2,5

322 Storax Stones 1963 MAY 22 15:40:00.14 NTS-YF 37.11106 -116.03906 U9ae -394.72 1257 UG-S WR 20 200 20 4.84 260 V 5.8 kCi LANL 1,2,5,6,8

323 Roller Coaster Clean Slate I 1963 MAY 25 11:17 NAFR 37.20000 -116.10000 \* 0 AS ST 0 0 UK 1,2,7,8

324 Storax Pleasant 1963 MAY 29 15:03:30.16 NTS-YF 37.12807 -116.04246 U9ah -210.31 1253 UG-S WR 0 20 2 50 V 760 Ci LANL 1,2,5,8,af

325 Roller Coaster Clean Slate II 1963 MAY 31 10:47 NAFR 37.15400 -116.07700 0 1306 AS ST 0 0 UK 1,2,7,8

326 Storax Yuba 1963 JUN 5 17:00:00.12 NTS-RM 37.19658 -116.20917 U12b.10 -242.41 2240 UG-T WR 3.1 3.1 4.36 V 110 Ci LLNL 1,2,5,8

327 Storax Hutia 1963 JUN 6 14:00:00.13 NTS-YF 37.04503 -116.03636 U3bc -134.57 1198 UG-S WR 0 20 3 90 LANL 1,2,5,6

328 Storax Apshapa 1963 JUN 6 16:58:00.15 NTS-YF 37.12465 -116.03998 U9ai -89.92 1254 UG-S WR 0 20 V 4 Ci LLNL 1,2,5,8

329 Roller Coaster Clean Slate III 1963 JUN 9 10:30 NAFR 37.20000 -116.10000 \* 0 AS ST 0 0 UK 1,2,7,8

330 Storax Mataco 1963 JUN 14 14:10:00.13 NTS-YF 37.04611 -116.01836 U3bk -195.56 1200 UG-S WR 0 20 3 92 LANL 1,2,5,6

331 Storax Kennebec 1963 JUN 25 23:00:00.15 NTS-YF 37.13140 -116.06806 U2af -226.16 1276 UG-S WR 0 20 4 110 V 30 Ci LLNL 1,2,5,6,8

332 Niblick Pekan 1963 AUG 12 23:45:00.13 NTS-YF 37.04169 -116.01564 U3bw -302.27 1197 UG-S WR 0 20 8 151 V 1.1 MCi LANL 1,2,5,6,8

333 Niblick Satsop 1963 AUG 15 13:00:00.15 NTS-YF 37.15408 -116.07664 U2g -224.94 1306 UG-S WR 0 20 3 90 LLNL 1,2,5,6

334 Niblick Kohocton S 1963 AUG 23 13:20:00.15 NTS-YF 37.12497 -116.03539 U9ak -254.51 UG-S WR 0 20 V 3 kCi LLNL 1,2,5,8

335 Niblick Natches SS 1963 AUG 23 13:20:00.14 NTS-YF 37.12500 -116.03600 ?? U9ak1 1261 UG-S WR 0 20 LLNL 1,2,5

336 Niblick Ahtanum 1963 SEP 13 13:53:00.15 NTS-YF 37.16336 -116.08064 U2l -225.55 1320 UG-S WR 0 20 1 9 V 35 Ci LLNL 1,2,5,6,8

337 Niblick Bilby 1963 SEP 13 17:00:00.13 NTS-YF 37.06042 -116.02167 U3on -714.3 1215 UG-S WR 249 210 S 249 5.80 490 V 1 Ci LANL 1,2,5,6,8,q

338 Niblick Carp 1963 SEP 27 14:20:00.13 NTS-YF 37.03731 -116.01569 U3cb -329.55 1193 UG-S WR 0 20 0.08 3.00 V 1.1 kCi LANL 1,2,5,7,8

339 Niblick Narraguagus 1963 SEP 27 17:30:00.15 NTS-YF 37.15478 -116.07336 U2f -150.27 1302 UG-S WR 0 20 0.08 3.00 V 160 Ci LLNL 1,2,5,7,8

340 Niblick Grunion 1963 OCT 11 14:00:00.11 NTS-YF 37.03733 -116.02117 U3bz -261.31 1193 UG-S WR 0 20 8 146 V 4 kCi LANL 1,2,5,6,8

341 Niblick Tornillo 1963 OCT 11 21:00:00.155 NTS-YF 37.11872 -116.03386 U9aq -149.05 1267 UG-S PR 0.38 0.38 120 V 520 Ci LLNL 1,2,5,6,8

342 Niblick Clearwater 1963 OCT 16 17:00:00.14 NTS-RM 37.19817 -116.22950 U12q -548.03 2233 UG-S WR 20 200 60 5.30 V 4.6 kCi LLNL 1,2,5,8

343 Niblick Mullet 1963 OCT 17 15:00:00.15 NTS-YF 37.13081 -116.06696 U2ag -60.35 1275 UG-S SE 0 20 LLNL 1,2,5

344 Niblick Shoal 1963 OCT 26 17:00:00.10 -NV 39.20020 -118.38030 -370 1574 UG-S VU 12 12 4.90 V 110 Ci LANL 1,2,8

345 Niblick Anchovy 1963 NOV 14 16:00:00.12 NTS-YF 37.03953 -116.01842 U3bq -260.25 1194 UG-S WR 0 20 9 158 V <230 kCi LANL 1,2,5,6,8

346 Niblick Mustang 1963 NOV 15 15:00:00.15 NTS-YF 37.13231 -116.04689 U9at -165.81 1257 UG-S WR 0 20 2 53 V 100 Ci LLNL 1,2,5,6,8

347 Niblick Greys 1963 NOV 22 17:30:00.15 NTS-YF 37.11933 -116.04517 U9ax -300.84 1248 UG-S WR 20 200 20 120 V <460 Ci LLNL 1,2,5,6,8

348 Niblick Barracuda S 1963 DEC 4 16:38:30.13 NTS-YF 37.04400 -116.01300 U3cr -263.3 1202 UG-S WR 0 20 V 100 Ci LANL 1,2,5,8

349 Niblick Sardine SS 1963 DEC 4 16:38:30.118 NTS-YF 37.03958 -116.02939 U3ch -262 1194 UG-S WR 0 20 8 149 V 30 Ci LANL 1,2,5,6,8

350 Niblick Eagle 1963 DEC 12 16:02:00.15 NTS-YF 37.13103 -116.04389 U9av -164.59 1254 UG-S WR 5.3 5.3 120 V 760 Ci LLNL 1,2,5,6,8

351 Niblick Tuna 1963 DEC 20 15:24:00.13 NTS-YF 37.05279 -116.03338 U3de -414.35 1203 UG-S WR 0 20 V <0.1 Ci LANL 1,2,5,8

352 Niblick Fore 1964 JAN 16 16:00:00.15 NTS-YF 37.14228 -116.04911 U9ao -490.42 1263 UG-S WR 20 200 38 S 38 5.20 317 V 1.2 kCi LLNL 1,2,5,6,8,q

353 Niblick Oconto 1964 JAN 23 16:00:00.15 NTS-YF 37.12642 -116.03633 U9ay -264.69 1260 UG-S WR 10.5 10.5 4.20 293 V 30 kCi LLNL 1,2,5,6,8

354 Niblick Club 1964 JAN 30 16:00:00.15 NTS-YF 37.13621 -116.07066 U2aa -180.44 1283 UG-S WR 0 20 2 4.10 30 V 590 Ci LLNL 1,2,5,7,8,af

355 Niblick Solendon 1964 FEB 12 15:38:00.12 NTS-YF 37.05661 -116.02924 U3cz -150.17 1206 UG-S WR 0 20 V 10 Ci LANL 1,2,5,8

356 Niblick Bunker 1964 FEB 13 15:30:00.15 NTS-YF 37.13202 -116.03234 U9bb -226.77 1270 UG-S WR 0 20 1.5 4.00 V <420 Ci LLNL 1,2,5,7,8

357 Niblick Bonefish 1964 FEB 18 15:37:19.12 NTS-YF 37.05938 -116.03332 U3bt -300.76 1207 UG-S WR 0 20 5 4.40 180 V 19 Ci LANL 1,2,5,7,8,af

358 Niblick Mackerel 1964 FEB 18 15:37:37.124 NTS-YF 37.09563 -116.05072 U4b -333.71 1236 UG-S WR 0 20 LANL 1,2,5

359 Niblick Klickitat 1964 FEB 20 15:30:00.15 NTS-YF 37.15089 -116.04011 U10e -492.56 1273 UG-S PR 70 29 S 70 5.10 280 V <10 Ci LLNL 1,2,5,6,8,q

360 Niblick Handicap 1964 MAR 12 15:00:00.01 NTS-YF 37.12993 -116.03634 U9ba -143.26 1261 UG-S WR 0 20 0.2 3.30 V 300 Ci LLNL 1,2,5,7,8

361 Niblick Pike 1964 MAR 13 16:02:00.12 NTS-YF 37.05047 -116.01147 U3cy -114.5 1211 UG-S WR 0 20 2 73 V 120 kCi LANL 1,2,5,6,8

362 Niblick Hook 1964 APR 14 14:40:00.15 NTS-YF 37.12892 -116.02983 U9bc -203.67 1276 UG-S WR 0 20 3 90 V <350 Ci LLNL 1,2,5,6,8

363 Niblick Sturgeon 1964 APR 15 14:30:00.12 NTS-YF 37.04392 -116.01836 U3bo -149.77 1198 UG-S WR 0 20 2 72 V 230 Ci LANL 1,2,5,6,8

364 Niblick Bogey 1964 APR 17 15:29:52.28 NTS-YF 37.11949 -116.03389 U9au -118.84 1265 UG-S WR 0 20 V <60 Ci LLNL 1,2,5,8

365 Niblick Turf 1964 APR 24 20:10:00.15 NTS-YF 37.14958 -116.05539 U10c -506.88 1272 UG-S WR 20 200 38 S 38 5.20 386 V <200 Ci LLNL 1,2,5,6,8,q

366 Niblick Pipefish 1964 APR 29 20:47:00.12 NTS-YF 37.03956 -116.02664 U3co -261.92 1194 UG-S WR 0 20 15 S 15 4.10 146 LANL 1,2,5,6,7,q

367 Niblick Driver 1964 MAY 7 13:00:00.15 NTS-YF 37.12026 -116.04029 U9ar -148.19 1253 UG-S WR 0 20 V 37 Ci LLNL 1,2,5,8

368 Niblick Backswing 1964 MAY 14 14:40:00.15 NTS-YF 37.11733 -116.03894 U9aw -163.37 1257 UG-S WR 0 20 8 146 V 37 Ci LLNL 1,2,5,6,8

369 Niblick Minnow 1964 MAY 15 16:15:00.12 NTS-YF 37.04169 -116.01222 U3cv -241.34 1199 UG-S WR 0 20 6 127 LANL 1,2,5,6

370 Niblick Ace 1964 JUN 11 16:45:00.15 NTS-YF 37.14861 -116.07600 U2n -262.74 1300 UG-S PR 3 3 V 9 Ci LLNL 1,2,5,8

371 Niblick Bitterling 1964 JUN 12 14:01:00.10 NTS-YF 37.03894 -116.01225 U3cu -192.6 1196 UG-S WR 0 20 0.5 3.60 90 LANL 1,2,5,7,af

372 Niblick Duffer 1964 JUN 18 13:30:00.20 NTS-YF 37.16599 -116.03841 U10ds -445.71 1288 UG-S WR 0 20 0.15 3.20 V <41 Ci LLNL 1,2,5,7,8

373 Niblick Fade 1964 JUN 25 13:30:00.14 NTS-YF 37.11114 -116.02878 U9be -205.16 1280 UG-S WR 0 20 6 127 V 35 Ci LLNL 1,2,5,6,8

374 Niblick Dub 1964 JUN 30 13:33:00.14 NTS-YF 37.17442 -116.05639 U10a -258.56 1282 UG-S PR 11.7 9 S 11.7 106 V 29 Ci LLNL 1,2,5,6,7,8,q

375 Whetstone Bye 1964 JUL 16 13:15:00.15 NTS-YF 37.18219 -116.04536 U10i -389.26 1295 UG-S WR 20 200 20 163 V <390 Ci LLNL 1,2,5,6,8

376 Whetstone Links 1964 JUL 23 13:30:00.15 NTS-YF 37.11376 -116.03201 U9bf -119.8 1273 UG-S WR 0 20 V <7 Ci LLNL 1,2,5,8

377 Whetstone Trogon 1964 JUL 24 18:30:00.04 NTS-YF 37.04608 -116.01219 U3dj -193.03 1204 UG-S WR 0 20 LANL 1,2,5

378 Whetstone Alva 1964 AUG 19 16:00:00.14 NTS-YF 37.15900 -116.08308 U2j -166.04 1320 UG-S WR 4.4 4.4 76 V 6.4 kCi LLNL 1,2,5,6,8

379 Whetstone Canvasback 1964 AUG 22 22:17:00.06 NTS-YF 37.06533 -116.01544 U3cp -447.66 1226 UG-S WR 0 20 18 S 18 V 2 kCi LANL 1,2,5,7,8,q

380 Whetstone Player 1964 AUG 27 14:30:00.15 NTS-YF 37.11736 -116.04066 U9cc -91.44 1254 UG-S SE 0 20 LLNL 1,2,5

381 Whetstone Haddock 1964 AUG 28 17:06:00.04 NTS-YF 37.06703 -116.02228 U3dl -363.66 1222 UG-S WR 0 20 LANL 1,2,5

382 Whetstone Guanay 1964 SEP 4 18:15:00.08 NTS-YF 37.01758 -116.02269 U3di -260.97 1184 UG-S WR 0 20 12 S 12 137 LANL 1,2,5,6,7,q

383 Whetstone Spoon 1964 SEP 11 14:00:00.10 NTS-YF 37.11400 -116.02500 U9bd -179.68 1289 UG-S WR 0 20 0.2 3.30 V 390 Ci LLNL 1,2,5,7,8

384 Whetstone Auk 1964 OCT 2 20:03:00.04 NTS-YF 37.07792 -116.00850 U7b -452.38 1254 UG-S WR 0 20 12 S 12 4.89 LANL 1,2,5,q

385 Whetstone Par 1964 OCT 9 14:00:00.12 NTS-YF 37.15133 -116.07700 U2p -403.86 1304 UG-S PR 38 38 4.80 145 V 610 Ci LLNL 1,2,5,6,8

386 Whetstone Barbel S 1964 OCT 16 15:59:30.038 NTS-YF 37.03950 -116.01567 U3bx -258.9 1194 UG-S WR 0 20 7 144 V 290 Ci LANL 1,2,5,6,8

387 Whetstone Turnstone SS 1964 OCT 16 15:59:30.03 NTS-YF 37.03300 -116.02600 U3dt 1191 UG-S WR 0 20 LANL 1,2,5

388 Whetstone Salmon 1964 OCT 22 16:00:00.00 -MS 31.14210 -89.56990 -830 46 UG-S VU 5.3 5.3 4.60 LLNL 1,2

389 Whetstone Garden 1964 OCT 23 15:00:00.94 NTS-YF 37.11703 -116.03115 U9aj -149.66 1274 UG-S WR 0 20 LLNL 1,2,5

390 Whetstone Forest 1964 OCT 31 17:04:58.61 NTS-YF 37.10722 -116.03225 U7a -380.73 1270 UG-S WR 0 20 V 5 Ci LLNL 1,2,5,8

391 Whetstone Handcar 1964 NOV 5 15:00:00.11 NTS-YF 37.17436 -116.06703 U10b -402.95 1307 UG-S PR 12 12 4.80 V 70 Ci LLNL 1,2,5,8

392 Whetstone Crepe 1964 DEC 5 21:15:00.10 NTS-YF 37.11442 -116.05344 U2q -404.2 1252 UG-S WR 20 200 12 S 20 4.80 226 V 250 Ci LLNL 1,2,5,6,8,q

393 Whetstone Drill (Source-Lower)S 1964 DEC 5 21:15:00.16 NTS-YF 37.13428 -116.06975 U2ai -219.46 1280 UG-S WR 3.4 3.4 V 61 kCi LLNL 1,2,5,8

394 Whetstone Drill (Target-Upper)SS 1964 DEC 5 21:15:00.16 NTS-YF 37.13428 -116.06975 U2ai 1280 UG-S WR 0 20 LLNL 1,2,5

395 Whetstone Parrot 1964 DEC 16 20:00:00.04 NTS-YF 37.03483 -116.01228 U3dk -180.32 1192 UG-S WR 1.3 1.3 79 V 230 kCi LANL 1,2,5,6,8

396 Whetstone Cassowary S 1964 DEC 16 20:00:00.07 NTS-YF 37.03956 -116.02389 U3bn -150.14 1194 UG-S WR 0 20 LANL 1,2,5

397 Whetstone Hoopoe SS 1964 DEC 16 20:00:00.07 NTS-YF 37.04800 -116.03400 U3cf 1200 UG-S SE 0 20 LANL 1,2,5

398 Whetstone Mudpack 1964 DEC 16 20:10:00.10 NTS-YF 37.17781 -116.06700 U10n -151.79 1310 UG-S WE 2.7 2.7 77 V <54 Ci LLNL 1,2,5,6,8

399 Whetstone Sulky 1964 DEC 18 19:35:00.09 NTS-18 37.08250 -116.34250 U18d -27.28 1597 UG-S PR 0.092 0.092 48 V 130 kCi LLNL 1,2,5,6,8

400 Whetstone Wool 1965 JAN 14 16:00:00.14 NTS-YF 37.11900 -116.02478 U9bh -215.13 1287 UG-S WR 0 20 7 137 V 200 Ci LLNL 1,2,5,6,8

401 Whetstone Tern 1965 JAN 29 18:22:00.03 NTS-YF 37.04499 -116.01323 U3dw -210.65 1202 UG-S WR 0 20 0.5 3.60 V 170 Ci LANL 1,2,5,7,8

402 Whetstone Cashmere 1965 FEB 4 15:30:00.11 NTS-YF 37.13075 -116.06158 U2ad -232.18 1270 UG-S WR 0 20 4 110 V 8 Ci LLNL 1,2,5,6,8

403 Whetstone Alpaca 1965 FEB 12 15:10:29.49 NTS-YF 37.16453 -116.07656 U2a -224.61 1315 UG-S WR 0.33 0.33 V 40 kCi LLNL 1,2,5,8

404 Whetstone Merlin 1965 FEB 16 17:30:00.04 NTS-YF 37.05164 -116.02381 U3ct -296.14 1203 UG-S WR 10.1 10.1 155 V LANL 1,2,5,6,8

405 Whetstone Wishbone 1965 FEB 18 16:18:47.15 NTS-FF 36.81700 -115.95000 U5a -179.22 913 UG-S WE 0 20 5 S 5 4.54 90 V 6.9 kCi LLNL 1,2,5,6,8,q

406 Whetstone Seersucker 1965 FEB 19 15:28:54.11 NTS-YF 37.11728 -116.03098 U9bm -142.34 1274 UG-S WR 0 20 V <410 Ci LLNL 1,2,5,8

407 Whetstone Wagtail 1965 MAR 3 19:13:00.03 NTS-YF 37.06450 -116.03719 U3an -749.59 1210 UG-S WR 20 200 51 S 51 5.33 200 V 13 Ci LANL 1,2,5,8,q,af

408 Whetstone Suede 1965 MAR 20 15:30:49.10 NTS-YF 37.11543 -116.02649 U9bk -143.52 1286 UG-S WR 0 20 0.2 3.30 V 1.3 kCi LLNL 1,2,5,7,8

409 Whetstone Cup 1965 MAR 26 15:34:08.16 NTS-YF 37.14761 -116.04289 U9cb -536.75 1267 UG-S WR 20 200 38 S 38 5.25 280 V 4.7 kCi LLNL 1,2,5,6,8,q

410 Whetstone Kestrel 1965 APR 5 21:00:00.04 NTS-YF 37.02581 -116.02264 U3dd -446.87 1187 UG-S WR 0 20 7 137 V 230 Ci LANL 1,2,5,6,8

411 Whetstone Palanquin 1965 APR 14 13:14:00.10 NTS-PM 37.28039 -116.52356 U20k -85.34 1861 CR PR 4.3 4.3 4.33 103 V 11 MCi LLNL 1,2,5,6,8

412 Whetstone Gum Drop 1965 APR 21 22:00:00.03 NTS-16 37.00800 -116.20300 U16a.02 -304.8 1931 UG-T WE 0 20 21 S 20 5.00 V 1.9 kCi LLNL 1,2,5,7,8,q

413 Whetstone Chenille 1965 APR 22 13:39:00.10 NTS-YF 37.11142 -116.03049 U9bg -140.74 1276 UG-S WR 0 20 1 3.90 80 V <110 Ci LLNL 1,2,5,7,8,af

414 Whetstone Muscovy 1965 APR 23 21:44:00.04 NTS-YF 37.01742 -115.99533 ? U3dx -180.29 1189 H-32UG-S WR 0 20 0.6 3.70 LANL 1,2,5,7

415 Whetstone Tee 1965 MAY 7 15:47:11.15 NTS-YF 37.14036 -116.06664 U2ab -190.2 1283 UG-S WE 7 7 117 V 1.6 kCi LLNL 1,2,5,6,8

416 Whetstone Buteo 1965 MAY 12 18:15:00.10 NTS-PM 37.24270 -116.43090 U20a -695.55 1960 UG-S WR 0 20 LANL 1,2,5

417 Whetstone Cambric 1965 MAY 14 14:57:52.15 NTS-FF 36.82338 -115.96684 U5e -294.28 929 UG-S WR 0.75 0.75 LLNL 1,2,5

418 Whetstone Scaup 1965 MAY 14 17:32:36.23 NTS-YF 37.05883 -116.01053 U3da(s) -427.02 1222 UG-S WR 0 20 12 174 LANL 1,2,5,6

419 Whetstone Tweed 1965 MAY 21 13:08:52.11 NTS-YF 37.11856 -116.02769 U9bn -281.07 1281 UG-S WR 0 20 15 192 V 600 Ci LLNL 1,2,5,6,8

420 Whetstone Petrel 1965 JUN 11 19:45:00.04 NTS-YF 37.04281 -116.01703 U3dy -180.75 1197 UG-S WR 1.3 1.3 88 LANL 1,2,5,6

421 Whetstone Organdy 1965 JUN 11 20:28:37.11 NTS-YF 37.11578 -116.02326 U9bo -169.47 1294 UG-S WR 0 20 0.5 3.60 V 130 Ci LLNL 1,2,5,7,8

422 Whetstone Diluted Waters 1965 JUN 16 16:30:00.15 NTS-FF 36.81806 -115.95606 U5b -190.5 916 UG-S WE 0 20 4 S 4 4.48 137 V 30 kCi LLNL 1,2,5,6,8,q

423 Whetstone Tiny Tot 1965 JUN 17 17:00:00.09 NTS-15 37.22342 -116.05697 U15e -110.95 UG-T WE 0 20 V 7 Ci LLNL 1,2,5,8

424 Flintlock Izzer 1965 JUL 16 13:04:24.10 NTS-YF 37.11500 -116.03217 U9bp -163.68 1273 UG-S WR 0 20 V LLNL 1,2,5,8

425 Flintlock Pongee 1965 JUL 22 13:21:08.11 NTS-YF 37.13179 -116.06686 U2ah -135.03 1274 UG-S WR 0 20 V 6 Ci LLNL 1,2,5,8

426 Flintlock Bronze 1965 JUL 23 17:00:00.04 NTS-YF 37.09786 -116.03300 U7f -530.96 1257 UG-S WR 20 200 67 S 67 5.40 320 V 1.7 kCi LANL 1,2,5,6,8,q

427 Flintlock Mauve 1965 AUG 6 17:23:30.04 NTS-YF 37.01767 -116.03983 U3dp -321 1185 UG-S WR 0 20 18 S 18 160 LANL 1,2,5,6,7,q

428 Flintlock Ticking 1965 AUG 21 13:43:08.15 NTS-YF 37.11263 -116.02602 U9bj -210.31 1288 UG-S WR 0 20 0.25 3.40 V 2.6 kCi LLNL 1,2,5,7,8

429 Flintlock Centaur 1965 AUG 27 13:51:13.11 NTS-YF 37.13731 -116.07008 U2ak -171.91 1283 UG-S WR 0 20 1 20 V 57 Ci LLNL 1,2,5,8,af

430 Flintlock Moa S 1965 SEP 1 20:08:00.04 NTS-YF 37.03700 -116.01500 U3ed 1194 UG-S WR 0 20 2.5 4.20 LANL 1,2,5

431 Flintlock Screamer SS 1965 SEP 1 20:08:00.04 NTS-YF 37.02300 -116.00897 U3dg -301.9 1184 UG-S WE 0 20 9 154 V 63 kCi LANL 1,2,5,6,8

432 Flintlock Elkhart 1965 SEP 17 15:08:23.10 NTS-YF 37.11103 -116.03461 U9bs -219.46 1267 UG-S WR 0 20 6 126 V 560 Ci LLNL 1,2,5,6,8

433 Flintlock Long Shot 1965 OCT 29 21:00:00.08 AK 51.43810 179.18260 ? -700 42 UG-S VU 80 80 6.10 LANL 1,2

434 Flintlock Sepia 1965 NOV 12 18:00:00.05 NTS-YF 37.04997 -116.02208 U3en -241.19 1202 UG-S WR 0 20 7 139 V LANL 1,2,5,6,8

435 Flintlock Kermet 1965 NOV 23 18:17:32.10 NTS-YF 37.16189 -116.07092 U2c -198.12 1304 UG-S WR 0 20 0.5 3.60 30 V 18 Ci LLNL 1,2,5,7,8,af

436 Flintlock Corduroy 1965 DEC 3 15:13:02.10 NTS-YF 37.16475 -116.05233 U10k -681.53 1275 UG-S WR 20 200 120 S 120 5.62 240 V 1.2 kCi LLNL 1,2,5,6,8,q

437 Flintlock Emerson 1965 DEC 16 15:39:18.15 NTS-YF 37.14084 -116.06318 U2al -259.87 1280 UG-S WR 0 20 3 76 V 0.6 Ci LLNL 1,2,5,6,8

438 Flintlock Buff 1965 DEC 16 19:15:00.04 NTS-YF 37.07260 -116.02910 U3dh -500.41 1223 UG-S WR 20 200 51 S 51 5.30 391 LANL 1,2,5,6,q

439 Flintlock Maxwell 1966 JAN 13 15:37:43.10 NTS-YF 37.11622 -116.02753 U9br -183.09 1283 UG-S WR 0 20 V 3 Ci LLNL 1,2,5,8

440 Flintlock Lampblack 1966 JAN 18 18:35:00.04 NTS-YF 37.09169 -116.01869 U7i -561.48 1267 UG-S WR 20 200 38 S 38 5.20 LANL 1,2,5,q

441 Flintlock Sienna 1966 JAN 18 18:35:00.04 NTS-YF 37.03733 -116.01843 U3cj -275.01 1193 UG-S WR 0 20 4 100 V LANL 1,2,5,8,af

442 Flintlock Dovekie 1966 JAN 21 18:28:00.04 NTS-YF 37.03172 -116.01575 U3cd -333.05 1189 UG-S WR 0 20 7 141 LANL 1,2,5,6

443 Flintlock Reo 1966 JAN 22 15:17:19.10 NTS-YF 37.15721 -116.03869 U10m -213.36 1283 UG-S WR 0 20 0.15 3.20 V 10 Ci LLNL 1,2,5,7,8

444 Flintlock Plaid II 1966 FEB 3 18:17:37.10 NTS-YF 37.12631 -116.06947 U2r -270.05 1272 UG-S WR 0 20 3.5 4.30 79 V 7 Ci LLNL 1,2,5,6,8

445 Flintlock Rex 1966 FEB 24 15:55:07.04 NTS-PM 37.27183 -116.43383 U20h(e) -671.69 1971 UG-S WR 19 19 5.00 V 310 Ci LLNL 1,2,5,8

446 Flintlock Red Hot 1966 MAR 5 18:15:00.10 NTS-RM 37.17450 -116.20836 U12g.06 -405.38 2299 UG-T WE 0 20 2 4.11 V 1 MCi LANL 1,2,5,8

447 Flintlock Finfoot S 1966 MAR 7 18:41:00.07 NTS-YF 37.03739 -116.02939 U3du -195.54 1193 UG-S WR 0 20 5 124 V LLNL 1,2,5,6,8

448 Flintlock Cinnamon SS 1966 MAR 7 18:41:00.04 NTS-YF 37.03500 -116.03200 U3dm 1192 UG-S SE 0 20 LANL 1,2,5

449 Flintlock Clymer 1966 MAR 12 18:04:13.11 NTS-YF 37.14367 -116.05253 U9ce -397.09 1266 UG-S WR 0 20 3 88 V 450 Ci LLNL 1,2,5,6,8

450 Flintlock Purple 1966 MAR 18 19:00:00.04 NTS-YF 37.00925 -116.00908 U3ds -332.79 1180 UG-S WR 0 20 7 140 LANL 1,2,5,6

451 Flintlock Templar 1966 MAR 24 14:55:28.14 NTS-YF 37.11333 -116.03136 U9bt -151 1275 UG-S PR 0.37 0.37 V LLNL 1,2,5,8

452 Flintlock Lime 1966 APR 1 18:40:00.04 NTS-YF 37.10269 -116.01994 U7j -561.44 1291 UG-S WR 0 20 LANL 1,2,5

453 Flintlock Stutz 1966 APR 6 13:57:17.10 NTS-YF 37.13953 -116.14086 U2ca -225.34 1458 UG-S WR 0 20 5 S 5 4.45 118 V 1 Ci LLNL 1,2,5,6,7,8,q

454 Flintlock Tomato 1966 APR 7 22:27:30.04 NTS-YF 37.01742 -115.99222 U3ek -226.31 1195 UG-S WR 0 20 6 134 LANL 1,2,5,6

455 Flintlock Duryea 1966 APR 14 14:13:43.10 NTS-PM 37.24267 -116.43086 U20a1 -544.25 1960 UG-S WR 70 70 5.40 V 2 Ci LLNL 1,2,5,8

456 Flintlock Fenton 1966 APR 23 14:55:26.14 NTS-YF 37.16054 -116.08287 U2m1 -167.64 1321 UG-S WR 1.4 1.4 3.30 V 1.7 kCi LLNL 1,2,5,7,8

457 Flintlock Pin Stripe 1966 APR 25 18:38:00.14 NTS-FF 36.88744 -115.94072 U11b -295.66 1066 UG-S WE 0 20 5 S 5 4.51 V 210 kCi LANL 1,2,5,8,q

458 Flintlock Ochre 1966 APR 29 13:33:00.04 NTS-YF 37.04367 -116.02249 U3ec -126.14 1196 UG-S SE 0 20 LANL 1,2,5

459 Flintlock Traveler 1966 MAY 4 13:32:17.09 NTS-YF 37.13706 -116.13714 U2cd -196.76 1430 UG-S WR 0 20 20 5.50 58 V 170 Ci LLNL 1,2,5,6,8

460 Flintlock Cyclamen 1966 MAY 5 14:00:00.04 NTS-YF 37.05061 -116.03786 U3cx -304.97 1203 UG-S WR 12 12 4.40 167 LANL 1,2,5,6

461 Flintlock Chartreuse 1966 MAY 6 15:00:00.08 NTS-PM 37.34800 -116.32194 U19d -666.75 2064 UG-S WR 73 73 5.50 LANL 1,2,5

462 Flintlock Tapestry 1966 MAY 12 19:37:26.20 NTS-YF 37.13428 -116.07111 U2an -247.19 1281 UG-S WR 0 20 10 S 10 4.30 90 V 8.6 kCi LLNL 1,2,5,6,7,8,q

463 Flintlock Piranha 1966 MAY 13 13:30:00.04 NTS-YF 37.08686 -116.03344 U7e -548.72 1237 UG-S WR 20 200 120 S 120 5.60 365 LANL 1,2,5,6,q

464 Flintlock Dumont 1966 MAY 19 13:56:28.14 NTS-YF 37.11114 -116.05792 U2t -670.77 1252 UG-S WR 20 200 240 S 200 5.90 370 V 35 Ci LLNL 1,2,5,6,8,q

465 Flintlock Discus Thrower 1966 MAY 27 20:00:00.04 NTS-YF 37.17839 -116.09775 U8a -337.06 1380 UG-S WE 22 22 5.10 291 LANL 1,2,5,6

466 Flintlock Pile Driver 1966 JUN 2 15:30:00.09 NTS-15 37.22710 -116.05550 U15a.01 -462.69 1525 UG-S WE 62 120 S 62 5.60 V 37 kCi LANL 1,2,5,8,q

467 Flintlock Tan 1966 JUN 3 14:00:00.04 NTS-YF 37.06840 -116.03530 U7k -560.68 1213 UG-S WR 20 200 160 S 160 5.70 415 LANL 1,2,5,6,q

468 Flintlock Puce 1966 JUN 10 14:30:00.04 NTS-YF 37.05942 -116.03881 U3bs -485.55 1208 UG-S WR 0 20 LANL 1,2,5

469 Flintlock Double Play 1966 JUN 15 17:00:00.04 NTS-16 37.00970 -116.20240 U16a.03 -327.7 1954 UG-S WE 0 20 V 840 kCi LLNL 1,2,5,8

470 Flintlock Kankakee 1966 JUN 15 18:02:47.13 NTS-YF 37.17153 -116.04886 U10p -455.25 1281 UG-S WR 20 200 200 400 V 160 Ci LLNL 1,2,5,6,8

471 Flintlock Vulcan 1966 JUN 25 17:13:00.07 NTS-YF 37.15531 -116.07217 U2bd -322.11 1300 UG-S PR 25 25 160 V 250 Ci LLNL 1,2,5,6,8

472 Flintlock Halfbeak 1966 JUN 30 22:15:00.07 NTS-PM 37.31581 -116.29897 U19b -819.3 2043 UG-S WR 365 365 6.10 400 LANL 1,2,5,6

473 Latchkey Saxon 1966 JUL 28 15:33:30.13 NTS-YF 37.14033 -116.09886 ?? U2cc -153.04 1411 UG-S PR 1.2 1.2 V 0.5 Ci LLNL 1,2,5,8

474 Latchkey Rovena 1966 AUG 10 13:16:00.07 NTS-YF 37.16867 -116.04772 U10s -195.25 1278 UG-S WR 0 20 1 35 V 2 Ci LLNL 1,2,5,6,8

475 Latchkey Tangerine 1966 AUG 12 15:36:00.05 NTS-YF 37.04631 -116.02932 U3eb -87.88 1199 UG-S SE 0 20 LANL 1,2,5

476 Latchkey Derringer 1966 SEP 12 15:30:00.54 NTS-FF 36.87694 -115.95061 U5i -255.12 1013 UG-S WE 7.8 7 S 7.8 4.60 V 12 kCi LANL 1,2,5,8,q

477 Latchkey Daiquiri 1966 SEP 23 18:00:00.04 NTS-YF 37.02094 -116.03639 ?? U7o -561.15 1260 UG-S WR 0 20 LANL 1,2,5

478 Latchkey Newark 1966 SEP 29 14:45:30.09 NTS-YF 37.16867 -116.04606 U10u -228.63 1279 UG-S WR 0 20 4 S 4 4.10 80 V 290 Ci LLNL 1,2,5,6,7,8,q

479 Latchkey Khaki 1966 OCT 15 19:00:00.05 NTS-YF 37.04707 -116.01698 U3et -232.55 1202 UG-S WR 0 20 LANL 1,2,5

480 Latchkey Simms 1966 NOV 5 14:45:00.00 NTS-YF 37.16994 -116.04722 U10w -198.15 1279 UG-S PR 2.3 2.3 58 V 11 Ci LLNL 1,2,5,6,8

481 Latchkey Ajax 1966 NOV 11 12:00:00.14 NTS-YF 37.13444 -116.04983 U9al -238.45 1254 UG-S WR 0 20 5 120 V 1 Ci LLNL 1,2,5,6,8

482 Latchkey Cerise 1966 NOV 18 15:02:00.04 NTS-YF 37.04278 -116.01033 U3eu -211.09 1202 UG-S WR 0 20 7 138 LANL 1,2,5,6

483 Latchkey Vigil 1966 NOV 22 15:00:00.13 NTS-YF 37.16938 -116.04831 U10ad -93.68 1278 UG-S SE 0 20 V LLNL 1,2,5,8

484 Latchkey Sterling 1966 DEC 3 12:15:00.05 -MS 31.14210 -89.56990 -830 46 UG-S VU 0.38 0.38 LLNL 1,2

485 Latchkey Sidecar 1966 DEC 13 17:50:00.04 NTS-YF 37.03479 -116.00680 U3ez -240.27 1195 UG-S WR 0 20 1 3.90 V LANL 1,2,5,7,8

486 Latchkey New Point 1966 DEC 13 21:00:00.08 NTS-FF 36.87725 -115.93789 U11c -243.84 1003 UG-S WE 0 20 7 S 7 4.60 60 V 3 Ci LLNL 1,2,5,6,8,q

487 Latchkey Greeley 1966 DEC 20 15:30:00.08 NTS-PM 37.30206 -116.40831 U20g -1214.63 1945 UG-S WR 870 870 6.30 52 LLNL 1,2,5,6

488 Latchkey Rivet I 1967 JAN 18 14:55:00.00 NTS-YF 37.16512 -116.04655 U10aa -152.1 1276 UG-S WR 0 20 0.15 3.20 LLNL 1,2,5,7

489 Latchkey Nash 1967 JAN 19 16:45:00.14 NTS-YF 37.14367 -116.13519 U2ce -363.78 1425 UG-S WR 39 28 S 39 5.40 150 V 69 kCi LLNL 1,2,5,6,7,8,q

490 Latchkey Bourbon 1967 JAN 20 17:40:04.41 NTS-YF 37.09986 -116.00383 U7n -559.72 1306 UG-S WR 20 200 41 S 41 5.30 11 LANL 1,2,5,6,q

491 Latchkey Rivet II 1967 JAN 26 16:30:00.00 NTS-YF 37.16480 -116.04806 U10z -197.78 1274 UG-S WR 0 20 0.8 3.80 V 0.1 Ci LLNL 1,2,5,7,8

492 Latchkey Ward 1967 FEB 8 15:15:00.13 NTS-YF 37.16753 -116.04714 U10x -257.25 1277 UG-S WR 0 20 11 S 11 4.80 79 LLNL 1,2,5,6,7,q

493 Latchkey Persimmon 1967 FEB 23 18:34:00.04 NTS-YF 37.01753 -116.01586 U3dn -299.11 1184 UG-S WR 0 20 4 S 4 4.40 171 LANL 1,2,5,6,7,q

494 Latchkey Agile 1967 FEB 23 18:50:00.13 NTS-YF 37.12686 -116.06639 U2v -731.52 1270 UG-S WR 20 200 210 S 200 5.80 275 LLNL 1,2,5,6,q

495 Latchkey Rivet III 1967 MAR 2 15:00:00.00 NTS-YF 37.16586 -116.04869 U10y -271.27 1275 UG-S WR 0 20 2.5 4.20 140 V LLNL 1,2,5,6,8

496 Latchkey Mushroom 1967 MAR 3 15:19:00.04 NTS-YF 37.03948 -116.01019 U3ef -179.55 1198 UG-S WR 0 20 0.6 3.70 80 V 0.4 Ci LANL 1,2,5,7,8,af

497 Latchkey Fizz 1967 MAR 10 15:00:00.04 NTS-YF 37.04613 -116.02978 U3fr -117.73 1199 UG-S SE 0 20 LANL 1,2,5

498 Latchkey Oakland 1967 APR 4 14:20:00.15 NTS-YF 37.16198 -116.08223 U2bi -165.35 1321 UG-S WR 0 20 V 100 Ci LLNL 1,2,5,8

499 Latchkey Heilman 1967 APR 6 15:00:00.12 NTS-YF 37.13733 -116.13268 U2cg -152.7 1405 UG-S WR 0 20 V 8 Ci LLNL 1,2,5,8

500 Latchkey Fawn 1967 APR 7 15:00:00.04 NTS-YF 37.05439 -116.02222 U3eo -271.06 1206 UG-S WR 0 20 1 3.90 155 LANL 1,2,5,6

501 Latchkey Chocolate 1967 APR 21 15:09:00.04 NTS-YF 37.01928 -116.03742 U3es -240.45 1186 UG-S WR 0 20 7 S 7 4.30 120 LANL 1,2,5,6,7,q

502 Latchkey Effendi 1967 APR 27 14:45:00.00 NTS-YF 37.13878 -116.06319 U2ap -219.29 1279 UG-S WR 0 20 0.8 3.80 35 LLNL 1,2,5,6

503 Latchkey Mickey 1967 MAY 10 13:40:00.041 NTS-YF 37.07786 -115.99531 U7m -499.63 1278 UG-S WR 20 200 22 S 22 5.00 56 LANL 1,2,5,6,q

504 Latchkey Commodore 1967 MAY 20 15:00:00.20 NTS-YF 37.13039 -116.06394 U2am -746.46 1271 UG-S WR 250 280 S 250 5.90 341 V <1 Ci LLNL 1,2,5,6,8,q

505 Latchkey Scotch 1967 MAY 23 14:00:00.04 NTS-PM 37.27508 -116.36997 U19as -977.39 2034 UG-S WR 155 155 5.70 LANL 1,2,5

506 Latchkey Absinthe 1967 MAY 26 12:30:00.03 NTS-YF 37.04502 -116.01905 U3ep -118.65 1199 UG-S SE 0 20 LANL 1,2,5

507 Latchkey Knickerbocker 1967 MAY 26 15:00:01.50 NTS-PM 37.24794 -116.48017 U20d -630.63 1878 UG-S WR 76 76 5.54 V 110 Ci LLNL 1,2,5,8

508 Latchkey Switch 1967 JUN 22 13:10:00.00 NTS-YF 37.12556 -116.02867 U9bv -301.75 1277 UG-S PR 3.1 3.1 V <1 Ci LLNL 1,2,5,8

509 Latchkey Midi Mist 1967 JUN 26 16:00:00.08 NTS-RM 37.20211 -116.20783 U12n.02 -374.9 2200 UG-T WE 0 20 30 S 20 5.10 V 4.5 kCi LLNL 1,2,5,7,8,q

510 Latchkey Umber 1967 JUN 29 11:25:00.04 NTS-YF 37.02856 -116.02261 U3em -310.24 1188 UG-S WE 10 11 S 10 4.60 165 V 26 kCi LANL 1,2,5,6,7,8,q

511 Crosstie Vito 1967 JUL 14 13:30:00.08 NTS-YF 37.16525 -116.04493 U10ab -90.83 1278 UG-S SE 0 20 LLNL 1,2,5

512 Crosstie Stanley 1967 JUL 27 13:00:00.12 NTS-YF 37.14872 -116.04853 U10g -483.72 1265 UG-S WR 20 200 22 S 22 5.00 271 V 37 Ci LLNL 1,2,5,6,8,q

513 Crosstie Gibson 1967 AUG 4 14:00:00.04 NTS-YF 37.02439 -116.01237 U3ew -240.76 1186 UG-S WR 0 20 1.5 4.00 120 LANL 1,2,5,7,af

514 Crosstie Washer 1967 AUG 10 14:10:00.00 NTS-YF 37.15669 -116.04728 U10r -467.41 1271 UG-S WR 0 20 V 0.5 Ci LLNL 1,2,5,8

515 Crosstie Bordeaux 1967 AUG 18 20:12:30.04 NTS-YF 37.01217 -116.03647 U3dr -332.02 1183 UG-S WR 0 20 18 S 18 4.60 159 LANL 1,2,5,6,7,q

516 Crosstie Lexington 1967 AUG 24 13:30:00.00 NTS-YF 37.16273 -116.07416 U2bm -227.69 1310 UG-S WR 0 20 0.8 3.80 50 V 1.1 kCi LLNL 1,2,5,7,8,af

517 Crosstie Door Mist 1967 AUG 31 16:30:00.04 NTS-RM 37.17756 -116.20894 U12g.07 -435.86 2295 UG-T WE 0 20 21 S 20 5.00 V 690 kCi LANL 1,2,5,7,8,q

518 Crosstie Yard 1967 SEP 7 13:45:00.00 NTS-YF 37.15317 -116.05278 U10af -520.6 1270 UG-S WR 20 200 22 S 22 5.00 352 V 0.3 Ci LLNL 1,2,5,6,8,q

519 Crosstie Gilroy 1967 SEP 15 17:30:00.04 NTS-YF 37.03487 -116.02085 U3ex -240.63 1191 UG-S WR 0 20 V LANL 1,2,5,8

520 Crosstie Marvel 1967 SEP 21 20:45:00.00 NTS-YF 37.16600 -116.03842 U10ds1 -174.35 1288 UG-S PR 2.2 2.2 47 V 27 Ci LLNL 1,2,5,6,8

521 Crosstie Zaza 1967 SEP 27 17:00:00.04 NTS-YF 37.09878 -116.05322 U4c -667 1240 UG-S WR 20 200 160 S 160 5.70 295 LANL 1,2,5,6,q

522 Crosstie Lanpher 1967 OCT 18 14:30:00.08 NTS-YF 37.11558 -116.05761 U2x -714.2 1255 UG-S WR 20 200 160 S 160 5.70 299 V 5 Ci LLNL 1,2,5,6,8,q

523 Crosstie Sazerac 1967 OCT 25 14:30:00.06 NTS-YF 37.03161 -116.02636 U3fa -301.34 1191 UG-S WR 0 20 9 160 V 0.1 Ci LANL 1,2,5,6,8

524 Crosstie Cognac 1967 OCT 25 14:30:00.14 NTS-YF 37.04980 -116.03958 U3fm -240.39 1202 UG-S WR 0 20 V LANL 1,2,5,8

525 Crosstie Worth 1967 OCT 25 14:45:00.08 NTS-YF 37.15634 -116.04859 U10ag -197 1269 UG-S WR 0 20 V 40 Ci LLNL 1,2,5,8

526 Crosstie Cobbler 1967 NOV 8 15:00:00.04 NTS-YF 37.09181 -116.03581 U7u -667.12 1242 UG-S WR 0 20 29 S 20 5.10 LANL 1,2,5,q

527 Crosstie Polka 1967 DEC 6 13:00:00.00 NTS-YF 37.15927 -116.05295 U10ai -195.01 1273 UG-S WR 0 20 0.2 3.30 V 380 Ci LLNL 1,2,5,7,8

528 Crosstie Gasbuggy 1967 DEC 10 19:30:00.14 -NM 36.67780 -107.20830 -1290 2179 UG-S PR 29 29 5.10 LLNL 1,2

529 Crosstie Stilt 1967 DEC 15 15:00:00.04 NTS-YF 37.03669 -116.00200 U3fh -332.43 1204 UG-S WR 0 20 2 S 2 LANL 1,2,5,7,q

530 Crosstie Hupmobile 1968 JAN 18 16:30:00.13 NTS-YF 37.14558 -116.06567 U2y -246.89 1287 UG-S WE 7.4 7.4 77 V 120 kCi LLNL 1,2,5,6,8

531 Crosstie Staccato 1968 JAN 19 15:00:00.00 NTS-YF 37.15640 -116.05390 U10ah -443.48 1272 UG-S WR 20 200 50 268 V 8 Ci LLNL 1,2,5,6,8

532 Crosstie Faultless 1968 JAN 19 18:15:00.08 -NV 38.63430 -116.21530 -118.1 -980 1834 UG-S WR 200 1000 1200 S 1000 6.30 LLNL 1,2,7,q

533 Crosstie Brush 1968 JAN 24 15:00:00.04 NTS-YF 37.04279 -116.01393 U3eq -118.3 1199 UG-S WR 0 20 V LANL 1,2,5,8

534 Crosstie Cabriolet 1968 JAN 26 16:00:00.11 NTS-PM 37.28086 -116.51444 U20l -51.82 1862 CR PR 2.3 2.3 109 V 220 kCi LLNL 1,2,5,6,8

535 Crosstie Mallet 1968 JAN 31 15:30:00.04 NTS-YF 37.00102 -116.00915 U3fv -240.27 1177 UG-S WR 0 20 4 110 LANL 1,2,5,af

536 Crosstie Torch 1968 FEB 21 15:00:00.04 NTS-YF 37.04163 -116.00195 U3fj -240.55 1210 UG-S WR 0 20 LANL 1,2,5

537 Crosstie Knox 1968 FEB 21 15:30:00.00 NTS-YF 37.11656 -116.05369 U2at -644.8 1253 UG-S WR 20 200 210 S 200 5.80 335 V 160 Ci LLNL 1,2,5,6,8,q

538 Crosstie Dorsal Fin 1968 FEB 29 17:08:30.04 NTS-RM 37.18461 -116.21144 U12e.10 -410.06 2260 UG-T WE 0 20 20 S 20 5.00 LANL 1,2,5,7,q

539 Crosstie Russet 1968 MAR 5 15:30:00.04 NTS-YF 36.96992 -116.05580 U6a -119.79 1170 UG-S WR 0 20 V 29 Ci LANL 1,2,5,8

540 Crosstie Buggy-A S 1968 MAR 12 17:04:00.11 NTS-30 37.00750 -116.36997 U30a -50.29 1560 CR PR 1.08 1.08 132 V 1.2 MCi LLNL 1,2,5,6,8

541 Crosstie Buggy-B SS 1968 MAR 12 17:04:00.11 NTS-30 37.00764 -116.37045 U30b -50.29 1560 CR PR 1.08 1.08 LLNL 1,2,5

542 Crosstie Buggy-C SS 1968 MAR 12 17:04:00.11 NTS-30 37.00778 -116.37093 U30c -50.29 1561 CR PR 1.08 1.08 LLNL 1,2,5

543 Crosstie Buggy-D SS 1968 MAR 12 17:04:00.11 NTS-30 37.00793 -116.37141 U30d -50.29 1560 CR PR 1.08 1.08 LLNL 1,2,5

544 Crosstie Buggy-E SS 1968 MAR 12 17:04:00.11 NTS-30 37.00808 -116.37189 U30e -50.29 1560 CR PR 1.08 1.08 LLNL 1,2,5

545 Crosstie Pommard 1968 MAR 14 15:19:00.06 NTS-YF 37.04772 -116.01081 U3ee -209.1 1208 UG-S WR 1.5 1.5 88 LANL 1,2,5,6

546 Crosstie Stinger 1968 MAR 22 15:00:00.04 NTS-PM 37.33261 -116.31067 U19l -667.76 2035 UG-S WR 20 200 120 S 120 5.60 284 LANL 1,2,5,6,7,q

547 Crosstie Milk Shake 1968 MAR 25 18:44:27.04 NTS-FF 36.87172 -115.93114 U5k -264.57 993 UG-S WE 0 20 10 S 10 34 V 30 Ci LLNL 1,2,5,6,7,8,q

548 Crosstie Bevel 1968 APR 4 15:02:00.04 NTS-YF 37.05231 -116.02088 U3fu -240.75 1205 UG-S WR 0 20 LANL 1,2,5

549 Crosstie Noor S 1968 APR 10 14:00:00.00 NTS-YF 37.15439 -116.07886 U2be -381.81 1310 UG-S WR 20 200 20 S 20 4.60 150 V 1 Ci LLNL 1,2,5,6,7,8,q

550 Crosstie Throw SS 1968 APR 10 14:00:00.00 NTS-YF 37.15700 -116.08300 U2bg 1316 UG-S WR 0 20 2 70 LLNL 1,2,5,af

551 Crosstie Shuffle 1968 APR 18 14:05:00.00 NTS-YF 37.15253 -116.03700 U10t -493.47 1279 UG-S WR 20 200 16 S 20 4.90 210 V 19 Ci LLNL 1,2,5,6,8,q

552 Crosstie Scroll 1968 APR 23 17:01:30.08 NTS-PM 37.33772 -116.37558 U19n -228.6 2032 UG-S VU 0 20 6 S 6 3.89 V 18 kCi LLNL 1,2,5,7,8,q

553 Crosstie Boxcar 1968 APR 26 15:00:00.07 NTS-PM 37.29542 -116.45569 U20i -1160.89 1914 UG-S WR 1300 1300 6.30 300 LLNL 1,2,5,6

554 Crosstie Hatchet 1968 MAY 3 16:00:00.04 NTS-YF 37.02854 -116.01988 U3fz -240.53 1188 UG-S WR 0 20 2 4.10 120 LANL 1,2,5,7,af

555 Crosstie Crock 1968 MAY 8 14:10:00.00 NTS-YF 37.15733 -116.03492 U10ak -181.76 1289 UG-S WR 0 20 1 3.90 V 140 Ci LLNL 1,2,5,7,8

556 Crosstie Clarksmobile 1968 MAY 17 13:00:00.00 NTS-YF 37.12006 -116.05883 U2as -472.65 1259 UG-S WR 20 200 9 S 20 4.70 235 LLNL 1,2,5,6,q

557 Crosstie Adze 1968 MAY 28 14:45:00.04 NTS-YF 37.00863 -115.99539 U3fw -240.03 1188 UG-S WR 0 20 V LANL 1,2,5,8

558 Crosstie Wembley 1968 JUN 5 14:21:30.04 NTS-YF 37.03484 -116.01606 U3ey -238.09 1191 UG-S WR 0 20 1.5 4.00 90 LANL 1,2,5,7,af

559 Crosstie Tub-A S 1968 JUN 6 21:30:00.00 NTS-YF 37.16700 -116.04300 ? U10ajc -188.98 1282 UG-S WR 0 20 LLNL 1,2,5

560 Crosstie Tub-B SS 1968 JUN 6 21:30:00.00 NTS-YF 37.16500 -116.04400 U10ajb 1279 UG-S WR 0 20 LLNL 1,2,5

561 Crosstie Tub-C SS 1968 JUN 6 21:30:00.00 NTS-YF 37.16500 -116.04200 U10ajf 1283 UG-S WR 0 20 LLNL 1,2,5

562 Crosstie Tub-D SS 1968 JUN 6 21:30:00.00 NTS-YF 37.16700 -116.04600 U10ajd -273 1278 UG-S WR 0 20 V 1.6 kCi LLNL 1,2,5,8

563 Crosstie Tub-F SS 1968 JUN 6 21:30:00.00 NTS-YF 37.16700 -116.04300 U10aja 1282 UG-S WR 0 20 LLNL 1,2,5

564 Crosstie Rickey 1968 JUN 15 13:59:59.97 NTS-PM 37.26492 -116.31464 U19c -683.28 2116 UG-S WR 20 200 300 S 200 5.90 167 LANL 1,2,5,6,7,q

565 Crosstie Funnel 1968 JUN 25 15:30:00.04 NTS-YF 37.04635 -116.03021 U3ga -118.7 1199 UG-S WR 0 20 V LANL 1,2,5,8

566 Crosstie Sevilla 1968 JUN 25 15:30:00.04 NTS-YF 37.04158 -115.99235 U3fk -358.65 1226 UG-S WR 0 20 V LANL 1,2,5,8

567 Crosstie Chateaugay 1968 JUN 28 12:22:00.08 NTS-PM 37.24550 -116.48286 U20t -607.02 1876 UG-S WR 20 200 58 S 58 5.30 LLNL 1,2,5,7,q

568 Bowline Spud 1968 JUL 17 14:00:00.04 NTS-YF 37.00096 -115.99888 U3fy -240.29 1178 UG-S WR 0 20 1.5 4.00 LANL 1,2,5,7

569 Bowline Tanya 1968 JUL 30 13:00:00.00 NTS-YF 37.13322 -116.08225 ? U2dt -381 1271 UG-S WR 20 200 10 S 20 V 140 Ci LLNL 1,2,5,7,8,q

570 Bowline Imp 1968 AUG 9 13:00:00.00 NTS-YF 37.16179 -116.07719 U2bj -178.46 1314 UG-S WR 0 20 0.35 3.50 30 V 4.2 kCi LLNL 1,2,5,7,8,af

571 Bowline Rack 1968 AUG 15 17:00:00.00 NTS-YF 37.12373 -116.04822 U9ap -199.72 1254 UG-S WR 0 20 1 3.90 V 10 Ci LLNL 1,2,5,7,8

572 Bowline Diana Moon 1968 AUG 27 16:30:00.04 NTS-FF 36.87722 -115.93108 U11e -242.01 1004 UG-S WE 0 20 9 9 101 V 12 kCi LLNL 1,2,5,6,8

573 Bowline Sled 1968 AUG 29 22:45:00.04 NTS-PM 37.25033 -116.34689 U19j -728.88 2057 UG-S WR 20 200 200 S 200 5.90 LANL 1,2,5,7,q

574 Bowline Noggin 1968 SEP 6 14:00:00.13 NTS-YF 37.13606 -116.04717 U9bx -581.99 1259 UG-S WR 20 200 120 S 120 5.60 300 V 16 Ci LLNL 1,2,5,6,8,q

575 Bowline Knife A 1968 SEP 12 14:00:00.04 NTS-YF 37.03178 -116.01164 U3fb -331.8 1190 UG-S WR 0 20 20 5.80 120 LANL 1,2,5,af

576 Bowline Stoddard 1968 SEP 17 14:00:00.04 NTS-YF 37.11986 -116.12747 U2cms -467.87 1370 UG-S PR 31 19 S 31 5.10 208 V 16 Ci LLNL 1,2,5,6,8,q

577 Bowline Hudson Seal 1968 SEP 24 17:05:01.09 NTS-RM 37.20480 -116.20640 U12n.04 -344.42 2168 UG-T WE 0 20 21 S 20 5.00 LLNL 1,2,5,7,q

578 Bowline Welder 1968 OCT 3 14:00:00.04 NTS-YF 37.04653 -116.02974 U3fs -117.66 1199 UG-S SE 0 20 LANL 1,2,5

579 Bowline Knife C 1968 OCT 3 14:29:00.04 NTS-YF 37.02592 -115.99283 U3er -301.44 1201 UG-S WR 0 20 3 S 3 140 LANL 1,2,5,6,7,q

580 Bowline Vat 1968 OCT 10 14:30:00.04 NTS-YF 37.13331 -116.04231 U9cf -194.92 1256 UG-S WR 0 20 1 3.90 LLNL 1,2,5,7

581 Bowline Hula 1968 OCT 29 15:36:00.09 NTS-YF 37.11326 -116.04093 U9bu -198.46 1254 UG-S WR 0 20 0.25 3.40 V 7 Ci LLNL 1,2,5,7,8

582 Bowline Bit-A S 1968 OCT 31 18:30:00.04 NTS-YF 37.04703 -116.02947 U3gt -148.31 1199 UG-S SE 0 20 1 3.90 LANL 1,2,5,7

583 Bowline Bit-B SS 1968 OCT 31 18:30:00.04 NTS-YF 37.04703 -116.02947 U3gt 1199 UG-S SE 0 20 LANL 1,2,5

584 Bowline File 1968 OCT 31 18:30:00.04 NTS-YF 37.01709 -116.03573 U3gb -228.95 1185 UG-S WR 0 20 7 140 LANL 1,2,5,af

585 Bowline Crew 1968 NOV 4 15:15:00.09 NTS-YF 37.13048 -116.08651 U2db -603.5 1287 H-36UG-S WR 20 200 22 S 22 5.00 120 LLNL 1,2,5,6,7,q

586 Bowline Crew-2nd S 1968 NOV 4 15:16:00.09 NTS-YF 37.13000 -116.08700 U2db 1287 UG-S WR 0 20 LLNL 1,2,5

587 Bowline Crew-3rd SS 1968 NOV 4 15:16:00.09 NTS-YF 37.13000 -116.08700 U2db 1287 UG-S WR 0 20 LLNL 1,2,5,7

588 Bowline Auger 1968 NOV 15 15:30:00.04 NTS-YF 37.04766 -115.99984 U3fx -240.62 1222 UG-S WR 0 20 1 3.90 LANL 1,2,5,7

589 Bowline Knife B 1968 NOV 15 15:45:00.04 NTS-YF 37.02614 -116.03325 U3dz -362.94 1188 UG-S WR 0 20 8 S 8 126 LANL 1,2,5,6,7,q

590 Bowline Ming Vase 1968 NOV 20 18:00:00.03 NTS-16 37.00983 -116.20642 U16a.04 -307.94 1931 UG-T WE 0 20 16 S 16 4.90 LANL 1,2,5,7,q

591 Bowline Tinderbox 1968 NOV 22 16:19:00.04 NTS-YF 37.13992 -116.04225 U9az -439.52 1261 UG-S WR 0 20 3 S 3 V 2 Ci LLNL 1,2,5,7,8,q

592 Bowline Schooner 1968 DEC 8 16:00:00.14 NTS-PM 37.34342 -116.56586 U20u -111.22 1668 CR PR 30 30 4.80 V 3.7 MCi LLNL 1,2,5,8

593 Bowline Bay Leaf 1968 DEC 12 15:00:00.04 NTS-YF 37.04704 -116.03020 U3gq -130.16 1199 UG-S SE 0 20 LANL 1,2,5

594 Bowline Tyg-A S 1968 DEC 12 15:10:00.08 NTS-YF 37.12082 -116.08056 U2dc1e -228.3 1273 UG-S WR 0 20 20 S 20 50 V 6.8 kCi LLNL 1,2,5,7,8,q,af

595 Bowline Tyg-B SS 1968 DEC 12 15:10:00.08 NTS-YF 37.11800 -116.08000 U2dc2d -251 1270 UG-S WR 0 20 3 80 V LLNL 1,2,5,8,af

596 Bowline Tyg-C SS 1968 DEC 12 15:10:00.08 NTS-YF 37.11800 -116.07800 U2dc3c -228.3 1268 UG-S WR 0 20 2 50 V LLNL 1,2,5,8,af

597 Bowline Tyg-D SS 1968 DEC 12 15:10:00.08 NTS-YF 37.12100 -116.07900 U2dc4a 1272 UG-S WR 0 20 1 40 LLNL 1,2,5,af

598 Bowline Tyg-E SS 1968 DEC 12 15:10:00.08 NTS-YF 37.12000 -116.07700 U2dc5b 1270 UG-S WR 0 20 3 90 LLNL 1,2,5,af

599 Bowline Tyg-F SS 1968 DEC 12 15:10:00.08 NTS-YF 37.11900 -116.08300 U2dc6f 1273 UG-S WR 0 20 4 100 LLNL 1,2,5,af

600 Bowline Scissors 1968 DEC 12 15:20:00.04 NTS-YF 37.00393 -116.03926 U3gh -240.58 1181 UG-S WR 0 20 1 3.90 100 V LANL 1,2,5,7,8,af

601 Bowline Benham 1968 DEC 19 16:30:00.04 NTS-PM 37.23147 -116.47358 U20c -1402.08 1887 UG-S WR 1150 1150 6.30 LLNL 1,2,5

602 Bowline Packard 1969 JAN 15 19:00:00.07 NTS-YF 37.14792 -116.06567 U2u -246.89 1288 UG-S WE 10 10 107 V 7 Ci LLNL 1,2,5,6,8

603 Bowline Wineskin 1969 JAN 15 19:30:00.04 NTS-RM 37.20914 -116.22539 U12r -518.16 2263 UG-S WR 20 200 40 S 40 5.30 LLNL 1,2,5,7,q

604 Bowline Shave 1969 JAN 22 15:00:00.04 NTS-YF 37.01549 -115.99430 U3gk -240.75 1191 UG-S WR 0 20 2 4.10 LANL 1,2,5,7

605 Bowline Vise 1969 JAN 30 15:00:00.038 NTS-YF 37.05331 -116.02925 U3ej -454.06 1204 UG-S WR 20 200 12 S 20 4.90 268 LANL 1,2,5,6,q

606 Bowline Biggin 1969 JAN 30 15:17:00.12 NTS-YF 37.13331 -116.04026 U9bz -242.32 1257 UG-S WR 0 20 LLNL 1,2,5

607 Bowline Nipper 1969 FEB 4 15:00:00.04 NTS-YF 37.00267 -116.00914 U3gl -240.73 1178 UG-S WR 0 20 LANL 1,2,5

608 Bowline Winch 1969 FEB 4 15:00:00.04 NTS-YF 37.00944 -116.04230 U3gf -240.63 1185 UG-S WR 0 20 0.6 3.70 LANL 1,2,5,7

609 Bowline Cypress 1969 FEB 12 16:18:20.88 NTS-RM 37.16906 -116.21072 U12g.09 -359.66 2265 H-41UG-T WE 0 20 15 S 15 LLNL 1,2,5,7,q

610 Bowline Valise 1969 MAR 18 14:30:00.12 NTS-YF 37.13914 -116.04084 U9by -90.25 1261 UG-S SE 0 20 V LLNL 1,2,5,8

611 Bowline Chatty 1969 MAR 18 14:40:00.43 NTS-YF 37.16228 -116.07588 U2bn -194.77 1312 UG-S WR 0 20 0.8 3.80 70 V 0.7 Ci LLNL 1,2,5,7,8,af

612 Bowline Barsac 1969 MAR 20 18:12:00.04 NTS-YF 37.02200 -116.03019 U3gc -304.13 1187 UG-S WR 0 20 10 S 10 4.60 162 V 43 Ci LANL 1,2,5,6,7,8,q

613 Bowline Coffer 1969 MAR 21 14:30:00.41 NTS-YF 37.13322 -116.08667 U2de -464.82 1291 UG-S WR 0 100 26 S 26 4.90 120 V 10 Ci LLNL 1,2,5,7,8,q,af

614 Bowline Gourd-Amber S 1969 APR 24 13:04:00.14 NTS-YF 37.16397 -116.07964 U2bf -181.3 1320 UG-S WR 0 20 0.8 3.80 50 LLNL 1,2,5,7,af

615 Bowline Gourd-Brown SS 1969 APR 24 13:04:00.14 NTS-YF 37.16000 -116.08200 U2bl 1317 UG-S WR 0 20 LLNL 1,2,5

616 Bowline Thistle 1969 APR 30 17:00:00.04 NTS-YF 37.09028 -116.00564 U7t -560.47 1281 UG-S WR 20 200 38 S 38 5.20 LANL 1,2,5,q

617 Bowline Blenton 1969 APR 30 17:00:00.04 NTS-YF 37.08150 -116.01394 U7p -557.73 1255 UG-S WR 20 200 51 S 51 5.30 V LANL 1,2,5,8,q

618 Bowline Purse 1969 MAY 7 13:45:00.04 NTS-PM 37.28289 -116.50064 U20v -598.75 1828 UG-S WR 20 200 90 S 90 5.80 137 LLNL 1,2,5,6,7,q

619 Bowline Aliment 1969 MAY 15 18:00:00.04 NTS-YF 37.01187 -115.98508 U2gj -240.51 1207 UG-S WR 0 20 2 4.10 LANL 1,2,5,7

620 Bowline Ipecac-A S 1969 MAY 27 14:00:00.04 NTS-YF 37.01499 -116.00218 U3hka -124.18 1181 UG-S SE 0 20 V LANL 1,2,5,8

621 Bowline Ipecac-B SS 1969 MAY 27 14:00:00.04 NTS-YF 37.01500 -116.00100 U3hkb 1182 UG-S SE 0 20 LANL 1,2,5

622 Bowline Torrido 1969 MAY 27 14:15:00.04 NTS-YF 37.07511 -115.99531 U7w -514.72 1270 UG-S WR 20 200 22 S 22 5.00 306 LANL 1,2,5,6,q

623 Bowline Tapper 1969 JUN 12 14:00:00.04 NTS-YF 37.00883 -116.03031 U3go -303 1181 UG-S WR 0 20 10 S 10 4.50 158 LANL 1,2,5,6,7,q

624 Bowline Bowl-1 S 1969 JUN 26 16:00:00.13 NTS-YF 37.16248 -116.07862 U2bo1 -198.12 1316 UG-S WR 0 20 2 4.10 LLNL 1,2,5,7

625 Bowline Bowl-2 SS 1969 JUN 26 16:00:00.13 NTS-YF 37.16100 -116.08000 U2bo2 1315 UG-S WR 0 20 3 80 LLNL 1,2,5,af

626 Mandrel Ildrim 1969 JUL 16 13:02:30.04 NTS-YF 37.11943 -116.05512 U2au -410.26 1256 UG-S WR 20 200 18 S 20 4.70 150 LLNL 1,2,5,6,7,q

627 Mandrel Hutch 1969 JUL 16 14:55:00.04 NTS-YF 37.13953 -116.08744 U2df -548.64 1300 UG-S WR 20 200 120 S 120 5.60 274 V 1.1 kCi LLNL 1,2,5,6,8,q

628 Mandrel Spider-A S 1969 AUG 14 14:30:00.04 NTS-YF 37.16024 -116.06361 U2bp1 -207.26 1292 UG-S WR 0 20 1 7 V 2 Ci LLNL 1,2,5,6,8

629 Mandrel Spider-B SS 1969 AUG 14 14:30:00.04 NTS-YF 37.15800 -116.06500 U2bp2 -213 1291 UG-S WR 0 20 1 30 LLNL 1,2,5,af

630 Mandrel Pliers 1969 AUG 27 13:45:00.04 NTS-YF 37.02150 -116.03808 U3gn -238.87 1187 UG-S WR 0 20 10 4.70 123 V LANL 1,2,5,6,8

631 Mandrel Horehound 1969 AUG 27 13:45:00.04 NTS-YF 36.99270 -115.99553 U3gm -331.83 1174 UG-S WR 0 20 LANL 1,2,5

632 Mandrel Rulison 1969 SEP 10 21:00:00.01 -CO 39.40580 -107.94810 ?? -2570 2469 UG-S PR 40 40 5.30 V LANL 1,2,8

633 Mandrel Minute Steak 1969 SEP 12 18:02:20.42 NTS-FF 36.87722 -115.92850 U11f -264.26 1007 UG-S WE 0 20 5 S 5 4.50 69 V 8.4 kCi LLNL 1,2,5,6,8,q

634 Mandrel Jorum 1969 SEP 16 14:30:00.04 NTS-PM 37.31414 -116.46067 U20e -1158.24 1898 UG-S WR 0 1000 800 S 800 6.20 LLNL 1,2,5,7,q

635 Mandrel Kyack-A S 1969 SEP 20 14:30:00.04 NTS-YF 37.15900 -116.06900 U2bq1 -192.02 1296 UG-S WR 0 20 0.8 3.80 50 LLNL 1,2,5,7,af

636 Mandrel Kyack-B SS 1969 SEP 20 14:30:00.04 NTS-YF 37.15700 -116.06700 U2bq2 -192 1293 UG-S WR 0 20 1 40 V 510 Ci LLNL 1,2,5,8,af

637 Mandrel Seaweed-C S 1969 OCT 1 14:30:00.04 NTS-YF 37.01051 -115.99957 U3hk3 -118.43 1184 UG-S SE 0 20 LANL 1,2,5

638 Mandrel Seaweed-D SS 1969 OCT 1 14:30:00.04 NTS-YF 37.01000 -116.00000 U3hkf -118 1183 UG-S SE 0 20 LANL 1,2,5,8

639 Mandrel Seaweed-E SS 1969 OCT 1 14:30:00.04 NTS-YF 37.01400 -115.99900 U3hkc 1184 UG-S SE 0 20 LANL 1,2,5

640 Mandrel Milrow 1969 OCT 2 22:06:00.04 AK 51.41710 179.18230 ? -1220 40 UG-S WR 1000 1000 6.40 610 LANL 1,2,6

641 Mandrel Pipkin 1969 OCT 8 14:30:00.14 NTS-PM 37.25672 -116.44075 U20b -624.84 1965 UG-S WR 200 1000 120 S 200 5.60 116 V 6 Ci LLNL 1,2,5,6,7,8,q

642 Mandrel Seaweed B 1969 OCT 16 14:00:00.04 NTS-YF 37.01277 -115.99826 U3hkd -118.55 1185 UG-S SE 0 20 LANL 1,2,5

643 Mandrel Cruet 1969 OCT 29 19:30:00.04 NTS-YF 37.12150 -116.12775 U2cn -263.65 1372 UG-S WR 11 11 5.10 76 LLNL 1,2,5,6

644 Mandrel Pod-A S 1969 OCT 29 20:00:00.04 NTS-YF 37.14021 -116.13050 U2ch -266.7 1397 H-31UG-S WR 16.7 200 16.7 T 16.7 5.00 V 3.9 kCi LLNL 1,2,5,8

645 Mandrel Pod-B SS 1969 OCT 29 20:00:00.04 NTS-YF 37.14000 -116.14300 U2ci 1464 UG-S WR LLNL 1,2,5

646 Mandrel Pod-C SS 1969 OCT 29 20:00:00.04 NTS-YF 37.13600 -116.14100 U2dj 1448 UG-S WR LLNL 1,2,5

647 Mandrel Pod-D SS 1969 OCT 29 20:00:00.04 NTS-YF 37.13500 -116.13700 U2ck -312 1424 UG-S WR V LLNL 1,2,5,8

648 Mandrel Calabash 1969 OCT 29 22:01:51.04 NTS-YF 37.14331 -116.06383 U2av -624.84 1283 UG-S WR 110 140 S 110 5.70 300 LLNL 1,2,5,6,q

649 Mandrel Scuttle 1969 NOV 13 15:15:00.13 NTS-YF 37.16463 -116.07483 U2bh -164.59 1312 UG-S WR 1.7 1.7 V 210 Ci LLNL 1,2,5,8

650 Mandrel Piccalilli 1969 NOV 21 14:52:00.04 NTS-YF 37.03119 -116.00206 U3fc -393.8 1195 UG-S WR 20 200 22 S 22 5.00 224 LANL 1,2,5,6,q

651 Mandrel Planer 1969 NOV 21 14:52:00.08 NTS-YF 37.04816 -116.02273 ? U3ei -377.84 1183 UG-S WR 0 20 22 S 20 LANL 1,2,5,q

652 Mandrel Diesel Train 1969 DEC 5 17:00:00.04 NTS-RM 37.17997 -116.21086 U12e.11 -419.15 2207 UG-T WE 0 20 20 S 20 5.00 LANL 1,2,5,7,q

653 Mandrel Culantro-A S 1969 DEC 10 15:00:00.04 NTS-YF 37.01472 -116.00287 U3hia -134.13 1181 UG-S WR 0 20 LANL 1,2,5

654 Mandrel Culantro-B SS 1969 DEC 10 15:00:00.04 NTS-YF 37.01500 -116.00200 U3hib 1182 UG-S WR 0 20 LANL 1,2,5

655 Mandrel Tun-A S 1969 DEC 10 15:30:00.07 NTS-YF 37.16800 -116.08000 U10am1 -193.55 1323 UG-S WR 0 20 2.5 4.20 30 LLNL 1,2,5,7,af

656 Mandrel Tun-B SS 1969 DEC 10 15:30:00.07 NTS-YF 37.16900 -116.08000 U10am2 -194 1324 UG-S WR 0 20 2 50 V 72 Ci LLNL 1,2,5,8,af

657 Mandrel Tun-C SS 1969 DEC 10 15:30:00.07 NTS-YF 37.16800 -116.07800 U10am3 -194 1319 UG-S WR 0 20 2 50 V LLNL 1,2,5,8,af

658 Mandrel Tun-D SS 1969 DEC 10 15:30:00.07 NTS-YF 37.16900 -116.07800 U10am4 -256 1320 UG-S WR 0 20 3 90 V LLNL 1,2,5,8,af

659 Mandrel Grape A 1969 DEC 17 15:00:00.04 NTS-YF 37.08381 -116.00158 U7s -550.67 1274 UG-S WR 20 200 89 S 89 5.50 336 LANL 1,2,5,6,q

660 Mandrel Lovage 1969 DEC 17 15:15:00.04 NTS-YF 37.00658 -116.02281 U3fe -378.05 1181 UG-S WR 0 20 16 S 16 4.80 193 LANL 1,2,5,6,q

661 Mandrel Terrine-White S 1969 DEC 18 19:00:00.04 NTS-YF 37.12047 -116.03478 U9bi1 -461.77 1264 UG-S WR 20 200 38 S 38 5.20 V 48 Ci LLNL 1,2,5,8,q

662 Mandrel Terrine-Yellow SS 1969 DEC 18 19:00:00.04 NTS-YF 37.12100 -116.02900 U9bi2 -417 1277 UG-S WR 20 200 V LLNL 1,2,5,8

663 Mandrel Fob-Green S 1970 JAN 23 16:30:00.21 NTS-YF 37.14100 -116.03800 U9iv27 -266.7 1266 UG-S WR 0 20 8 4.60 76 LLNL 1,2,5,6

664 Mandrel Fob-Red SS 1970 JAN 23 16:30:00.21 NTS-YF 37.13742 -116.03678 U9iv24 1263 UG-S WR 0 20 LLNL 1,2,5

665 Mandrel Fob-Blue SS 1970 JAN 23 16:30:00.21 NTS-YF 37.14100 -116.03400 U9iy27 1273 UG-S WR 0 20 LLNL 1,2,5

666 Mandrel Ajo 1970 JAN 30 17:00:00.04 NTS-YF 37.03083 -116.03475 U3gd -304.11 1191 UG-S WR 0 20 20 S 20 4.60 175 LANL 1,2,5,6,7,q

667 Mandrel Grape B 1970 FEB 4 17:00:00.04 NTS-YF 37.09808 -116.02650 U7v -554.46 1269 UG-S WR 20 200 120 S 120 5.60 440 LANL 1,2,5,6,q

668 Mandrel Belen 1970 FEB 4 17:00:00.07 NTS-YF 37.05502 -116.03884 U3br -420.8 1206 UG-S WR 20 200 210 S 97 240 LANL 1,2,5,q,af

669 Mandrel Labis 1970 FEB 5 15:00:00.04 NTS-YF 37.16397 -116.03883 U10an -441.96 1286 UG-S WR 25 25 4.70 240 LLNL 1,2,5,6

670 Mandrel Diana Mist 1970 FEB 11 19:15:00.04 NTS-RM 37.20128 -116.20522 U12n.06 -402.02 2229 UG-T WE 0 20 12 S 12 4.70 LANL 1,2,5,7,q

671 Mandrel Cumarin 1970 FEB 25 14:28:38.04 NTS-YF 37.03667 -115.99958 U3gz -408.51 1206 UG-S WR 20 200 51 S 51 5.20 219 LANL 1,2,5,6,q

672 Mandrel Yannigan-Red S 1970 FEB 26 15:30:00.04 NTS-YF 37.11636 -116.06144 U2ay1 -388.62 1258 UG-S WR 20 200 70 S 70 5.30 287 V 320 Ci LLNL 1,2,5,6,7,8,q

673 Mandrel Yannigan-Blue SS 1970 FEB 26 15:30:00.04 NTS-YF 37.11400 -116.06700 U2ay3 -394 1258 UG-S WR 20 200 20 200 V LLNL 1,2,5,8,af

674 Mandrel Yannigan-White SS 1970 FEB 26 15:30:00.04 NTS-YF 37.11800 -116.06700 U2ay2 -363 1261 UG-S WR 20 200 30 230 V LLNL 1,2,5,8,af

675 Mandrel Cyathus 1970 MAR 6 14:24:00.94 NTS-YF 37.02311 -116.09175 ?? U8b -289.56 1353 UG-S WR 8.7 8.7 4.50 60 V <46 Ci LLNL 1,2,5,6,8

676 Mandrel Arabis-Red S 1970 MAR 6 15:00:00.21 NTS-YF 37.14000 -116.03200 ?? U9itsv26 -249.94 1276 H-29UG-S WR 0 20 3.5 4.30 113 LLNL 1,2,5,6

677 Mandrel Arabis-Green SS 1970 MAR 6 15:00:00.21 NTS-YF 37.14200 -116.03500 U9itsx28 1270 UG-S WR 0 20 LLNL 1,2,5

678 Mandrel Arabis-Blue SS 1970 MAR 6 15:00:00.21 NTS-YF 37.14000 -116.03800 U9itsz26 1265 UG-S SE 0 20 LLNL 1,2,5

679 Mandrel Jal 1970 MAR 19 14:03:30.04 NTS-YF 37.00108 -116.02286 U3hh -301.39 1178 UG-S WR 0 20 6 S 6 4.10 139 LANL 1,2,5,6,7,q

680 Mandrel Shaper 1970 MAR 23 23:05:00.04 NTS-YF 37.08622 -116.02111 U7r -560.44 1252 UG-S WR 20 200 89 S 89 5.50 335 LANL 1,2,5,6,q

681 Mandrel Handley 1970 MAR 26 19:00:00.20 NTS-PM 37.30047 -116.53411 U20m -1209.14 1772 UG-S WR 1000 15000 1900 S 1900 6.50 400 LLNL 1,2,5,6,7,q

682 Mandrel Snubber 1970 APR 21 14:30:00.04 NTS-YF 37.05489 -115.98811 U3ev2s -343.5 1253 UG-S WE 12.7 9 S 12.7 4.60 V 55 kCi LANL 1,2,5,7,8,q

683 Mandrel Can-Green S 1970 APR 21 15:00:00.04 NTS-YF 37.11200 -116.08300 U2dd1 -274.32 1266 H-40UG-S WR 20 200 15 S 20 4.80 180 LLNL 1,2,5,6,7,q

684 Mandrel Can-Red SS 1970 APR 21 15:00:00.04 NTS-YF 37.11558 -116.08011 ? U2dd4 1268 UG-S WR 20 200 20 170 LLNL 1,2,5,af

685 Mandrel Beebalm 1970 MAY 1 14:13:00.04 NTS-YF 37.05922 -116.02817 U3fn -390.21 1209 UG-S WR 0 20 1 S 1 4.20 LANL 1,2,5,7,q

686 Mandrel Hod-C (Blue) 1970 MAY 1 14:25:00.00 NTS-YF 37.13800 -116.03200 U9iz25 1276 UG-S SE 0 20 LLNL 1,2

687 Mandrel Hod-A (Green) S 1970 MAY 1 14:40:00.17 NTS-YF 37.13600 -116.03500 U9itsx23 -265.18 1268 UG-S WR 0 20 9 S 9 4.50 157 V 1 Ci LLNL 1,2,5,6,7,8,q

688 Mandrel Hod-B (Red) SS 1970 MAY 1 14:40:00.17 NTS-YF 37.13300 -116.03408 ? U9itsx20 -241 1266 UG-S WR 0 20 4 110 V LLNL 1,2,5,8,af

689 Mandrel Mint Leaf 1970 MAY 5 15:30:00.17 NTS-RM 37.21653 -116.18406 U12t.01 -396.24 2094 UG-T WE 0 20 21 S 20 5.20 V 960 kCi LLNL 1,2,5,7,8,q

690 Mandrel Diamond Dust 1970 MAY 12 14:00:00.04 NTS-16 37.01044 -116.20189 U16a.05 -221.89 1899 UG-T VU 0 20 V 5 Ci LANL 1,2,5,8

691 Mandrel Cornice-Yellow S 1970 MAY 15 13:30:00.17 NTS-YF 37.16600 -116.03600 U10ap1 -390.14 1293 H-44UG-S WR 20 200 45 S 45 5.30 241 LLNL 1,2,5,6,7,q

692 Mandrel Cornice-Green SS 1970 MAY 15 13:30:00.17 NTS-YF 37.16192 -116.03886 ? U10ap3 1286 UG-S WR 20 200 40 250 LLNL 1,2,5,af

693 Mandrel Manzanas 1970 MAY 21 14:00:00.04 NTS-YF 37.02886 -115.99194 ?? U3gr -240.65 1194 UG-S WR 0 20 1 S 1 3.50 V <0.2 Ci LANL 1,2,5,7,8,q

694 Mandrel Morrones 1970 MAY 21 14:15:00.03 NTS-YF 37.07081 -116.01300 U3ei -482.72 1237 UG-S WR 20 200 29 S 29 5.10 LANL 1,2,5,q

695 Mandrel Hudson Moon 1970 MAY 26 14:16:00.17 NTS-RM 37.18260 -116.21340 U12e.12 -422.45 2274 UG-T WE 0 20 9 S 9 5.00 V 1.3 kCi LLNL 1,2,5,7,8,q

696 Mandrel Flask-Green S 1970 MAY 26 15:00:00.05 NTS-YF 37.11300 -116.06300 U2az1 -529 1251 H-53UG-S PR 105 120 S 105 5.60 297 V 63 Ci LLNL 1,2,5,6,8,q

697 Mandrel Flask-Yellow SS 1970 MAY 26 15:00:00.05 NTS-YF 37.11800 -116.06400 U2az2 -335 1259 UG-S PR 0.09 0.09 V LLNL 1,2,5,8

698 Mandrel Flask-Red SS 1970 MAY 26 15:00:00.05 NTS-YF 37.11619 -116.06670 ? U2az3 -152.4 1259 UG-S PR 0.035 0.035 V LLNL 1,2,5,8

699 Mandrel Piton-C 1970 MAY 28 11:45:00.20 NTS-YF 37.13847 -116.02992 U9itsaa2 -100.58 1279 UG-S WR 0 20 2.5 4.20 V 25 kCi LLNL 1,2,5,8

700 Mandrel Piton-A S 1970 MAY 28 12:00:00.164 NTS-YF 37.14398 -116.03262 U9itsy30 -236.22 1274 UG-S WR 0 20 0.8 3.80 V >10 Ci LLNL 1,2,5,7,8

701 Mandrel Piton-B SS 1970 MAY 28 12:00:00.164 NTS-YF 37.14100 -116.03500 U9itsx27 1270 UG-S WR 0 20 LLNL 1,2,5

702 Mandrel Arnica-Yellow S 1970 JUN 26 13:00:00.04 NTS-YF 37.11392 -116.08614 U2dd2 -309.37 1270 UG-S WR 0 20 ? 3.5 4.30 150 LLNL 1,2,5,6

703 Mandrel Arnica-Violet SS 1970 JUN 26 13:00:00.04 NTS-YF 37.11700 -116.08500 U2dd3 -264 1272 UG-S WR 0 20 2 50 V 73 Ci LLNL 1,2,5,8,af

704 Emery Scree-Acajou S 1970 OCT 13 15:05:00.02 NTS-YF 37.13745 -116.03404 U9itsx24 -249.33 1269 UG-S WR 0 20 1 3.90 V 11 Ci LLNL 1,2,5,7,8

705 Emery Scree-Alhambra SS 1970 OCT 13 15:05:00.02 NTS-YF 37.13400 -116.03200 U9itsz21 -192 1273 UG-S WR 0 20 2 50 V LLNL 1,2,5,8,af

706 Emery Scree-Chamois SS 1970 OCT 13 15:05:00.02 NTS-YF 37.13700 -116.03200 U9itsz24 1275 UG-S SE 0 20 LLNL 1,2,5

707 Emery Tijeras 1970 OCT 14 14:30:00.04 NTS-YF 37.07070 -116.00510 U7y -560.62 1249 UG-S WR 20 200 89 S 89 5.50 308 LANL 1,2,5,6,q

708 Emery Truchas-Chacon S 1970 OCT 28 14:30:00.03 NTS-YF 37.01400 -116.01900 U3hn -118.38 1182 UG-S SE 0 20 LANL 1,2,5

709 Emery Truchas-Chamisal SS 1970 OCT 28 14:30:00.04 NTS-YF 37.01400 -116.01800 U3ho -118 1182 UG-S SE 0 20 V 3 Ci LANL 1,2,5,8

710 Emery Truchas-Rodarte SS 1970 OCT 28 14:30:00.04 NTS-YF 37.01500 -116.02000 U3hm 1183 UG-S WR 0 20 8 150 LANL 1,2,5,af

711 Emery Abeytas 1970 NOV 5 15:00:00.04 NTS-YF 37.02947 -116.01181 U3gx -393.46 1188 UG-S WR 20 200 16 S 20 4.90 222 LANL 1,2,5,6,q

712 Emery Penasco 1970 NOV 19 15:00:00.04 NTS-YF 37.01479 -116.01588 U3hl -270.92 1183 UG-S WR 0 20 2 4.10 150 LANL 1,2,5,7,af

713 Emery Carrizozo S 1970 DEC 3 15:07:00.00 NTS-YF 37.00600 -116.04100 U3hr 1183 UG-S WR 0 20 LANL 1,2,5

714 Emery Corazon SS 1970 DEC 3 15:07:00.04 NTS-YF 37.00200 -116.03791 U3ha -241.12 1180 UG-S WR 0 20 0.1 3.10 LANL 1,2,5,7

715 Emery Canjilon 1970 DEC 16 16:00:00.05 NTS-YF 37.07252 -116.02499 U3fq -302.19 1227 UG-S WR 0 20 LANL 1,2,5

716 Emery Artesia 1970 DEC 16 16:00:00.09 NTS-YF 37.10017 -116.00794 U7x -484.83 1302 UG-S WR 20 200 45 5.20 268 LANL 1,2,5,6

717 Emery Avens-Andorre S 1970 DEC 16 16:00:00.17 NTS-YF 37.14200 -116.04000 U9itst28 1264 UG-S WR 0 20 LLNL 1,2,5

718 Emery Avens-Alkermes SS 1970 DEC 16 16:00:00.17 NTS-YF 37.13700 -116.03900 U9itsu24 1262 UG-S WR 0 20 LLNL 1,2,5

719 Emery Avens-Asamite SS 1970 DEC 16 16:00:00.17 NTS-YF 37.13400 -116.03600 U9itsw21 1264 UG-S WR 0 20 LLNL 1,2,5

720 Emery Avens-Cream SS 1970 DEC 16 16:00:00.17 NTS-YF 37.14289 -116.03400 U9itsx29 -292.91 1271 UG-S WR 0 20 20 5.10 177 V 66 Ci LLNL 1,2,5,6,8

721 Emery Carpetbag 1970 DEC 17 16:05:00.16 NTS-YF 37.12914 -116.08300 U2dg -661.42 1284 UG-S WR 220 180 S 220 5.80 335 V 5 Ci LLNL 1,2,5,6,8,q

722 Emery Baneberry 1970 DEC 18 15:30:00.20 NTS-YF 37.17314 -116.09886 U8d -277.98 1367 UG-S WR 10 28 S 10 5.20 150 V 6.7 MCi LLNL 1,2,5,6,8,q

723 Emery Embudo 1971 JUN 16 14:50:00.04 NTS-YF 37.03317 -116.01367 U3hd -303.06 1191 UG-S WR 0 20 18 S 18 4.90 157 LANL 1,2,5,6,7,q

724 Emery Dexter 1971 JUN 23 14:00:00.04 NTS-YF 37.01321 -116.01642 U3hs -119.94 1182 UG-S SE 0 20 LANL 1,2,5

725 Emery Laguna 1971 JUN 23 15:30:00.04 NTS-YF 37.02197 -116.02267 U3fd -454.92 1186 UG-S WR 20 200 12 S 20 4.80 188 LANL 1,2,5,6,q

726 Emery Harebell 1971 JUN 24 14:00:00.16 NTS-YF 37.14669 -116.06683 U2br -518.77 1287 UG-S WR 20 200 38 S 38 5.20 300 V 840 Ci LLNL 1,2,5,6,8,q

727 Emery Camphor 1971 JUN 29 18:30:00.16 NTS-RM 37.17678 -116.21149 U12g.10 -423.67 2289 UG-T WE 0 20 20 4.90 V 220 Ci LLNL 1,2,5,8

728 Grommet Diamond Mine 1971 JUL 1 14:00:00.04 NTS-16 37.01153 -116.20339 U16a.06 -266.15 1896 UG-T VU 0 20 LANL 1,2,5

729 Grommet Miniata 1971 JUL 8 14:00:00.082 NTS-YF 37.11011 -116.05142 U2bu -528.83 1247 UG-S PR 83 89 S 83 5.50 247 V 180 Ci LLNL 1,2,5,6,8,q

730 Grommet Bracken 1971 JUL 9 14:00:00.16 NTS-YF 37.16445 -116.03273 U10aq -304.8 1297 UG-S WR 0 20 0.25 3.40 V 1 Ci LLNL 1,2,5,7,8

731 Grommet Apodaca 1971 JUL 21 13:33:00.05 NTS-YF 37.01438 -115.99193 U3gs -241.4 1195 UG-S WR 0 20 0.25 3.40 LANL 1,2,5,7

732 Grommet Barranca 1971 AUG 4 13:30:00.042 NTS-YF 37.02607 -116.01956 U3he -270.74 1187 UG-S WR 0 20 LANL 1,2,5

733 Grommet Nama-Amarylis S 1971 AUG 5 18:07:45.20 NTS-YF 37.14500 -116.03400 U9itsxy3 -272.8 1273 UG-S WR 0 20 LLNL 1,2,5

734 Grommet Nama-Mephisto SS 1971 AUG 5 18:07:45.20 NTS-YF 37.14100 -116.03200 U9itsz27 1276 UG-S WR 0 20 LLNL 1,2,5

735 Grommet Baltic 1971 AUG 6 14:31:00.16 NTS-YF 37.13853 -116.04090 U9itss25 -411.48 1260 UG-S WR 0 20 LLNL 1,2,5

736 Grommet Algodones 1971 AUG 18 14:00:00.03 NTS-YF 37.05719 -116.03633 U3jn -527.61 1206 UG-S WR 20 200 67 S 67 5.40 261 LANL 1,2,5,6,q

737 Grommet Frijoles-Deming S 1971 SEP 22 14:00:00.037 NTS-YF 37.02200 -116.02000 ? U3jw -149.86 1186 UG-S SE 0 20 0.5 3.60 LANL 1,2,5,7

738 Grommet Frijoles-Espuela SS 1971 SEP 22 14:00:00.04 NTS-YF 37.02300 -116.01700 U3ju 1186 UG-S SE 0 20 LANL 1,2,5

739 Grommet Frijoles-Guaje SS 1971 SEP 22 14:00:00.04 NTS-YF 37.02400 -116.01600 U3hf 1186 UG-S WR 0 20 LANL 1,2,5

740 Grommet Frijoles-Petaca SS 1971 SEP 22 14:00:00.04 NTS-YF 37.02200 -116.01700 U3hz 1185 UG-S WR 0 20 LANL 1,2,5

741 Grommet Pedernal 1971 SEP 29 14:00:00.04 NTS-YF 37.01103 -116.00733 U3hg -378.68 1180 UG-S WR 0 20 4 S 4 4.40 LANL 1,2,5,q

742 Grommet Chantilly 1971 SEP 29 14:30:00.14 NTS-YF 37.12448 -116.08698 U2di -330.71 1280 UG-S WR 0 20 LLNL 1,2,5

743 Grommet Cathay 1971 OCT 8 14:30:00.15 NTS-YF 37.11378 -116.03733 U9ch -377.95 1261 UG-S WR 0 20 7 S 7 4.70 256 LLNL 1,2,5,6,7,q

744 Grommet Lagoon 1971 OCT 14 14:30:00.16 NTS-YF 37.17978 -116.05309 U10ar -304.8 1286 UG-S WR 0 20 5 4.40 60 LLNL 1,2,5,af

745 Grommet Cannikin 1971 NOV 6 22:00:00.06 AK 51.47190 179.10690 ?? -1790 63 UG-S WR 0 5000 4800 6.80 1100 LLNL 1,2,6

746 Grommet Diagonal Line 1971 NOV 24 20:15:00.17 NTS-FF 36.87922 -115.93469 U11g -264.26 1010 UG-S WE 0 20 4 S 4 53 V 6.8 kCi LLNL 1,2,5,6,8,q

747 Grommet Parnassia 1971 NOV 30 15:45:00.15 NTS-YF 37.16045 -116.07023 U2bc -330.71 1302 UG-S WR 0 20 10 4.70 150 LLNL 1,2,5,af

748 Grommet Chaenactis 1971 DEC 14 21:09:59.16 NTS-YF 37.12394 -116.08956 U2dl -331.01 1281 UG-S WR 20 200 24 S 24 4.70 113 LLNL 1,2,5,6,7,q

749 Grommet Hospah 1971 DEC 14 21:10:01.04 NTS-YF 37.02585 -116.02915 U3je -302.03 1188 UG-S WR 0 20 11 170 LANL 1,2,5,af

750 Grommet Yerba 1971 DEC 14 21:10:01.04 NTS-YF 37.02325 -116.05863 U1c -331.99 1202 UG-S WR 0 20 5 120 LANL 1,2,5,af

751 Grommet Mescalero 1972 JAN 5 15:10:00.04 NTS-YF 37.04566 -116.02954 U3gu -120.24 1198 UG-S WR 0 20 LANL 1,2,5

752 Grommet Cowles 1972 FEB 3 21:45:00.04 NTS-YF 37.00108 -116.01943 U3hx -301.78 1178 UG-S WR 0 20 2 4.10 90 LANL 1,2,5,7,af

753 Grommet Dianthus 1972 FEB 17 19:02:00.16 NTS-YF 37.16570 -116.05624 U10at -304.8 1279 UG-S WR 0 20 3.5 4.30 90 V 18 Ci LLNL 1,2,5,7,8,af

754 Grommet Sappho 1972 MAR 23 18:50:00.16 NTS-YF 37.11305 -116.08082 U2dh2 -197.82 1266 UG-S WR 0 20 4 100 V 9 Ci LLNL 1,2,5,8,af

755 Grommet Ocate S 1972 MAR 30 21:00:00.08 NTS-YF 37.00400 -116.01600 U3jp 1179 UG-S WR 0 20 LANL 1,2,5

756 Grommet Onaja SS 1972 MAR 30 21:00:00.04 NTS-YF 37.00547 -116.02008 U3js -279.04 1180 UG-S WR 0 20 8 4.60 LANL 1,2,5

757 Grommet Longchamps 1972 APR 19 16:32:00.16 NTS-YF 37.12194 -116.08383 U2dm -326.44 1276 UG-S WR 0 20 8 4.60 30 LLNL 1,2,5,6

758 Grommet Jicarilla 1972 APR 19 16:42:00.05 NTS-YF 37.00661 -116.01661 U3jm -148.11 1180 UG-S WR 0 20 LANL 1,2,5

759 Grommet Misty North 1972 MAY 2 19:15:00.04 NTS-RM 37.20770 -116.20880 U12n.05 -376.08 2199 UG-T WE 0 20 19 S 19 5.00 LANL 1,2,5,7,q

760 Grommet Kara 1972 MAY 11 14:00:00.16 NTS-YF 37.11249 -116.08450 U2dh3 -259.08 1267 UG-S WR 0 20 0.5 3.60 V 7 Ci LLNL 1,2,5,7,8

761 Grommet Zinnia 1972 MAY 17 14:10:00.16 NTS-YF 37.12056 -116.08789 U2dk -322.78 1277 UG-S WR 0 20 8 S 8 4.40 102 V 7 Ci LLNL 1,2,5,6,7,8,q

762 Grommet Monero 1972 MAY 19 17:00:00.05 NTS-YF 37.06469 -116.00175 U3jg -537.35 1245 UG-S WR 0 20 12 S 12 4.90 LANL 1,2,5,q

763 Grommet Merida 1972 JUN 7 15:20:00.16 NTS-YF 37.11589 -116.08533 U2dn -204.22 1271 UG-S WR 0 20 0.8 3.80 50 V 10 Ci LLNL 1,2,5,7,8,af

764 Grommet Capitan 1972 JUN 28 14:41:00.19 NTS-YF 36.99296 -116.09063 ? U3jj -134.48 1175 UG-S WR 0 20 0.6 3.70 LANL 1,2,5,7

765 Grommet Tajique 1972 JUN 28 16:30:00.07 NTS-YF 37.06959 -115.99211 U7aa -332.31 1274 UG-S WR 0 20 LANL 1,2,5

766 Grommet Haplopappus 1972 JUN 28 16:30:03.16 NTS-YF 37.13520 -116.03527 U9itsw22 -184.4 1264 UG-S WR 0 20 6 130 LLNL 1,2,5,af

767 Toggle Diamond Sculls 1972 JUL 20 17:16:00.16 NTS-RM 37.21453 -116.18336 U12t.02 -419.4 2113 UG-T WE 0 20 21 S 21 5.00 LLNL 1,2,5,7,q

768 Toggle Atarque 1972 JUL 25 13:30:00.06 NTS-YF 37.01249 -116.01505 U3ht -294.2 1182 UG-S WR 0 20 1.5 4.00 V LANL 1,2,5,8

769 Toggle Cebolla S 1972 AUG 9 13:31:10.04 NTS-YF 37.00700 -116.02000 U3jc -287 1180 UG-S WR 0 20 V LANL 1,2,5,8

770 Toggle Cuchillo SS 1972 AUG 9 13:31:10.04 NTS-YF 37.00375 -116.01906 U3jt -198.81 1179 UG-S WR 0 20 LANL 1,2,5

771 Toggle Solano SS 1972 AUG 9 13:31:10.04 NTS-YF 37.00300 -116.01800 U3jx 1179 UG-S SE 0 20 LANL 1,2,5

772 Toggle Oscuro 1972 SEP 21 15:30:00.19 NTS-YF 37.08206 -116.03656 U7z -560.21 1225 UG-S WR 20 200 160 S 160 5.70 411 LANL 1,2,5,6,q

773 Toggle Delphinium 1972 SEP 26 14:30:00.16 NTS-YF 37.12136 -116.08572 U2dp -295.66 1276 UG-S WR 15 15 4.40 118 LLNL 1,2,5,6

774 Toggle Akbar 1972 NOV 9 15:15:00.16 NTS-YF 37.16204 -116.03316 U10ax -267 1295 UG-S WR 0 20 0.6 3.70 LLNL 1,2,5,7

775 Toggle Arsenate 1972 NOV 9 18:15:00.16 NTS-YF 37.12144 -116.03233 U9ci -250.24 1268 UG-S WR 0 20 0.6 3.70 V 12 Ci LLNL 1,2,5,7,8

776 Toggle Canna-Umbrinus S 1972 NOV 17 18:00:00.16 NTS-YF 37.14000 -116.03300 U9itsyz2 -213.36 1273 UG-S WR 0 20 LLNL 1,2,5

777 Toggle Canna-Limoges SS 1972 NOV 17 18:00:00.16 NTS-YF 37.14000 -116.03300 U9itsyz26 1273 UG-S SE 0 20 LLNL 1,2,5

778 Toggle Tuloso 1972 DEC 12 16:30:00.04 NTS-YF 37.03130 -116.02123 U3gi -271.09 1189 UG-S WR 0 20 0.2 3.30 LANL 1,2,5,7

779 Toggle Solanum 1972 DEC 14 15:30:00.16 NTS-YF 37.13809 -116.03473 U9itsw24 -201.17 1267 UG-S WR 0 20 V LLNL 1,2,5,8

780 Toggle Flax-Source 1972 DEC 21 20:15:00.24 NTS-YF 37.13990 -116.08330 U2dj -440 1296 UG-S WR 0 20 22 S 20 5.00 178 LLNL 1,2,6,q

781 Toggle Flax-Test S 1972 DEC 21 20:15:24.35 NTS-YF 37.13994 -116.08325 U2dj -688.85 1296 UG-S WE 20 200 LLNL 1,2,5

782 Toggle Flax-Backup SS 1972 DEC 21 20:15:24.35 NTS-YF 37.13994 -116.08325 U2dj 1296 UG-S WE 0 20 LLNL 1,2,5

783 Toggle Alumroot 1973 FEB 14 15:30:00.16 NTS-YF 37.14709 -116.05009 U9cj -182.88 1264 UG-S WR 0 20 LLNL 1,2,5

784 Toggle Miera 1973 MAR 8 16:10:00.19 NTS-YF 37.10358 -116.02672 U7ad -568.39 1279 UG-S WR 20 200 67 S 67 5.40 340 V LANL 1,2,5,6,8,q

785 Toggle Gazook 1973 MAR 23 20:15:00.17 NTS-YF 37.11727 -116.08703 U2do -326.14 1274 UG-S WR 0 20 0.2 3.30 V 12 Ci LLNL 1,2,5,7,8

786 Toggle Natoma 1973 APR 5 14:50:00.16 NTS-YF 37.17788 -116.05389 U10aw -243.84 1283 UG-S WR 0 20 LLNL 1,2,5

787 Toggle Angus S 1973 APR 25 22:25:00.03 NTS-YF 37.00483 -116.02844 U3jg -452.63 1180 UG-S WR 0 20 9 R? S 9 4.70 V 0.6 Ci LANL 1,2,5,8,q

788 Toggle Velarde SS 1973 APR 25 22;25:00.07 NTS-YF 36.99400 -116.02200 U3jk -277 1176 UG-S WR 0 20 8 150 V 250 Ci LANL 1,2,5,8,af

789 Toggle Colmor 1973 APR 26 15:15:00.04 NTS-YF 37.01215 -116.01997 U3hv -245.81 1182 UG-S WR 0 20 0.5 3.60 V LANL 1,2,5,7,8

790 Toggle Starwort 1973 APR 26 17:15:00.16 NTS-YF 37.12306 -116.05850 U2bs -563.88 1261 UG-S WR 90 120 S 90 5.60 351 V 10 Ci LLNL 1,2,5,6,8,q

791 Toggle Mesita 1973 MAY 9 13:30:00.04 NTS-YF 37.00627 -116.01608 U3jd -149.25 1180 UG-S WR 0 20 V LANL 1,2,5,8

792 Toggle Rio Blanco-1 S 1973 MAY 17 16:00:00.12 -CO 39.79300 -108.36800 ? -2040 2005 UG-S PR 33 33 5.40 LLNL 1,2

793 Toggle Rio Blanco-2 SS 1973 MAY 17 16:00:00.12 -CO 39.79300 -108.36700 2005 UG-S PR 33 33 LLNL 1,2

794 Toggle Rio Blanco-3 SS 1973 MAY 17 16:00:00.12 -CO 39.79300 -108.36800 2005 UG-S PR 33 33 LLNL 1,2

795 Toggle Cabresto 1973 MAY 24 13:30:00.04 NTS-YF 37.07805 -116.03077 U7h -197.89 1228 UG-S WR 0 20 15 4.80 LANL 1,2,5

796 Toggle Kashan 1973 MAY 24 14:30:00.16 NTS-YF 37.16223 -116.05597 U10av -265.18 1277 UG-S WR 0 20 2 4.10 110 V 270 Ci LLNL 1,2,5,7,8,af

797 Toggle Dido Queen 1973 JUN 5 17:00:00.17 NTS-RM 37.18503 -116.21511 U12e.14 -391.36 2247 UG-T WE 0 20 18 S 18 5.10 LLNL 1,2,5,7,q

798 Toggle Almendro 1973 JUN 6 13:00:00.08 NTS-PM 37.24510 -116.34600 U19v -1066.52 2069 UG-S WR 200 1000 250 S 250 6.10 LANL 1,2,5,7,q

799 Toggle Potrillo 1973 JUN 21 14:45:00.08 NTS-YF 37.09204 -116.02723 U7af -567.02 1255 UG-S WR 20 200 58 R? S 58 5.30 340 V LANL 1,2,5,8,q,af

800 Toggle Portulaca 1973 JUN 28 19:15:12.40 NTS-YF 37.14842 -116.08586 U2bv -466.34 1311 UG-S WR 20 200 24 S 24 4.90 183 V LLNL 1,2,5,6,7,8,q

801 Toggle Silene 1973 JUN 28 19:45:00.16 NTS-YF 37.11491 -116.04092 U9ck -198.12 1254 UG-S WR 0 20 0.005 2.00 LLNL 1,2,5,7

802 Arbor Polygonum 1973 OCT 2 14:30:00.166 NTS-YF 37.15879 -116.07299 U2by -213.36 1304 UG-S WR 0 20 LLNL 1,2,5

803 Arbor Waller 1973 OCT 2 15:15:00.164 NTS-YF 37.15391 -116.06771 U2bz -310.9 1294 UG-S WR 0 20 1 3.90 V 3 Ci LLNL 1,2,5,7,8

804 Arbor Husky Ace 1973 OCT 12 17:00:00.08 NTS-RM 37.20039 -116.20317 U12n.07 -415.66 2238 UG-T WE 0 20 8 S 8 4.80 LANL 1,2,5,7,q

805 Arbor Bernal 1973 NOV 28 15:30:00.08 NTS-YF 37.01099 -116.02448 U3jy -285.29 1183 UG-S WR 0 20 5 4.40 140 V 0.1 Ci LANL 1,2,5,8,af

806 Arbor Pajara 1973 DEC 12 19:00:00.10 NTS-YF 36.99149 -116.02413 U3ji -278.17 1175 UG-S WR 0 20 5 4.40 150 V 5 Ci LANL 1,2,5,8,af

807 Arbor Seafoam 1973 DEC 13 15:17:00.17 NTS-YF 37.16140 -116.07305 U2ea -198.12 1306 UG-S WR 0 20 V 5 Ci LLNL 1,2,5,8

808 Arbor Spar 1973 DEC 19 18:30:00.04 NTS-YF 37.00577 -116.01889 U3jr -148.43 1180 UG-S SE 0 20 LANL 1,2,5

809 Arbor Elida 1973 DEC 19 19:16:00.11 NTS-YF 37.00114 -116.03141 U3hy -381.42 1178 UG-S WR 0 20 0.3 S 0.3 V 0.8 Ci LANL 1,2,5,8,q

810 Arbor Pinodrops-Sloat S 1974 JAN 10 15:38:00.17 NTS-YF 37.17400 -116.05200 U10as -342.9 1283 UG-S WR 0 20 LLNL 1,2,5

811 Arbor Pinedrops-Tawny SS 1974 JAN 10 15:38:00.17 NTS-YF 37.17400 -116.05200 U10as 1283 UG-S WR 0 20 LLNL 1,2,5

812 Arbor Pinedrops-Bayou SS 1974 JAN 10 15:38:00.17 NTS-YF 37.17400 -116.05200 U10as -343 1283 UG-S WR 0 20 V 6 Ci LLNL 1,2,5,8

813 Arbor Latir 1974 FEB 27 17:00:00.09 NTS-YF 37.10426 -116.05284 U4d -640.77 1243 UG-S WR 20 200 180 S 150 5.80 230 LANL 1,2,5,q,af

814 Arbor Hulsea 1974 MAR 14 17:00:00.166 NTS-YF 37.15513 -116.06409 U2bx -195.07 1289 UG-S WR 0 20 V 67 Ci LLNL 1,2,5,8

815 Arbor Sapello 1974 APR 12 15:15:00.08 NTS-YF 37.01494 -116.04414 U3ge -180.74 1189 UG-S WR 0 20 LANL 1,2,5

816 Arbor Potrero 1974 APR 23 15:13:00.161 NTS-YF 37.15997 -116.07641 U2eb -210.31 1310 UG-S WR 0 20 0.5 3.60 LLNL 1,2,5,7

817 Arbor Plomo 1974 MAY 1 14:02:00.21 NTS-YF 37.03110 -115.98560 U3ff -149.35 1227 UG-S WR 0 20 LANL 1,2,5

818 Arbor Jib 1974 MAY 8 16:55:00.085 NTS-YF 37.00098 -116.00162 U3hb -180.44 1177 UG-S WR 0 20 LANL 1,2,5

819 Arbor Grove 1974 MAY 22 14:15:00.169 NTS-YF 37.11481 -116.07470 U2ds -313.94 1264 UG-S WR 0 20 2.5 4.20 50 V 26 Ci LLNL 1,2,5,8,af

820 Arbor Jara 1974 JUN 6 14:40:00.08 NTS-YF 37.00384 -116.02351 U3hp -378.06 1180 UG-S WR 0 20 4 S 4 4.40 150 V LANL 1,2,5,8,q,af

821 Arbor Ming Blade 1974 JUN 19 16:00:00.084 NTS-RM 37.21031 -116.20726 U12n.08 -387.65 2212 UG-T WE 0 20 20 S 20 5.00 LANL 1,2,5,7,q

822 Bedrock Escabosa 1974 JUL 10 16:00:00.092 NTS-YF 37.07503 -116.03182 U7ac -638.52 1223 UG-S WR 20 200 160 S 150 5.70 350 V LANL 1,2,5,8,q,af

823 Bedrock Crestlake-Tansan S 1974 JUL 18 14:00:01.20 NTS-YF 37.11900 -116.08600 U2dw -272 1274 UG-S WR 0 20 2 4.10 60 V 19 Ci LLNL 1,2,5,8,af

824 Bedrock Crestlake-Briar SS 1974 JUL 18 14:00:01.20 NTS-YF 37.11900 -116.08600 U2dw -373.68 1274 UG-S WR 0 20 V LLNL 1,2,5,8

825 Bedrock Puye 1974 AUG 14 14:00:00.11 NTS-YF 37.02341 -116.03636 U3jl -430.08 1188 UG-S WR 0 20 5 S 5 4.60 V LANL 1,2,5,8,q

826 Bedrock Portmanteau 1974 AUG 30 15:00:00.163 NTS-YF 37.15248 -116.08333 U2ax -655.32 1313 UG-S WR 20 200 210 S 160 5.80 270 LLNL 1,2,5,q,af

827 Bedrock Pratt 1974 SEP 25 14:00:00.08 NTS-YF 37.01212 -116.03029 U3hq -313.96 1183 UG-S WR 0 20 5 4.40 180 LANL 1,2,5,af

828 Bedrock Trumbull 1974 SEP 26 14:30:00.164 NTS-YF 37.09321 -116.09476 U4aa -262.74 1269 UG-S WR 0 20 0.2 3.30 LLNL 1,2,5,7

829 Bedrock Stanyan 1974 SEP 26 15:05:00.17 NTS-YF 37.13263 -116.06839 U2aw -573.02 1275 UG-S WR 20 200 120 S 100 5.60 LLNL 1,2,5,q

830 Bedrock Estaca 1974 OCT 17 17:13:00.118 NTS-YF 37.03973 -116.04819 ?? U3ja -321.05 1180 UG-S WR 0 20 LANL 1,2,5

831 Bedrock Hybla Fair 1974 OCT 28 15:00:00.168 NTS-RM 37.20113 -116.20394 U12n.09 -404.47 2227 UG-T WE 0 20 V 500 Ci LLNL 1,2,5,8

832 Bedrock Temescal 1974 NOV 2 15:30:00.164 NTS-YF 37.09319 -116.09167 U4ab -262.74 1263 UG-S WR 0 20 V 2 Ci LLNL 1,2,5,8

833 Bedrock Puddle 1974 NOV 26 15:00:00.90 NTS-YF 37.00103 -116.01121 U3kg -183.97 1169 UG-S SE 0 20 LANL 1,2,5

834 Bedrock Keel 1974 DEC 16 17:30:00.088 NTS-YF 37.01130 -116.01763 U3hu -304.72 1182 UG-S WR 0 20 4 S 4 4.30 170 LANL 1,2,5,7,q,af

835 Bedrock Portola S 1975 FEB 6 15:30:00.165 NTS-YF 37.17841 -116.05156 U10bb -198.12 1285 UG-S WR 0 20 0.35 3.50 V 10 Ci LLNL 1,2,5,7,8

836 Bedrock Portola-Larkin SS 1975 FEB 6 15:30:00.16 NTS-YF 37.17841 -116.05156 U10bb -274 1285 UG-S WR 0 20 V LLNL 1,2,5,8

837 Bedrock Teleme 1975 FEB 6 16:13:00.17 NTS-YF 37.11412 -116.02104 U9cl -304.8 1300 UG-S WR 0 20 6 4.50 150 LLNL 1,2,5,7,af

838 Bedrock Bilge 1975 FEB 19 20:10:00.224 NTS-YF 37.00220 -116.02456 T? U3kc -318.35 1179 UG-S WR 0 20 V LANL 1,2,5,8

839 Bedrock Topgallant 1975 FEB 28 16:15:00.09 NTS-YF 37.10620 -116.05625 T? U4e -713.37 1245 UG-S WR 20 200 160 S 160 5.70 320 LANL 1,2,5,q,af

840 Bedrock Cabrillo 1975 MAR 7 16:00:00.169 NTS-YF 37.13401 -116.08424 T? U2dr -600.46 1288 UG-S WR 20 200 89 S 89 5.50 170 V 11 Ci LLNL 1,2,5,8,q,af

841 Bedrock Dining Car 1975 APR 5 19:45:00.187 NTS-RM 37.18792 -116.21388 U12e.18 -383.01 2238 UG-T WE 0 20 20 S 20 4.90 LLNL 1,2,5,7,q

842 Bedrock Edam 1975 APR 24 14:10:00.17 NTS-YF 37.11567 -116.08739 U2dy -411.48 1272 UG-S WR 20 200 9 S 20 4.60 170 LLNL 1,2,5,7,q,af

843 Bedrock Obar 1975 APR 30 15:00:00.90 NTS-YF 37.10886 -116.02880 U7ag -568.8 1279 UG-S WR 20 200 38 S 38 5.20 LANL 1,2,5,q

844 Bedrock Tybo 1975 MAY 14 14:00:00.16 NTS-PM 37.22078 -116.47416 U20y -765.05 1880 UG-S WR 200 1000 380 S 380 6.00 LLNL 1,2,5,7,q

845 Bedrock Stilton 1975 JUN 3 14:20:00.17 NTS-PM 37.34010 -116.52290 U20p -731.52 1667 UG-S WR 20 200 275 S 200 5.90 LLNL 1,2,5,7,q

846 Bedrock Mizzen 1975 JUN 3 14:40:00.106 NTS-YF 37.09483 -116.03611 U7ah -637.18 1247 UG-S WR 20 200 160 S 140 5.70 260 LANL 1,2,5,q,af

847 Bedrock Alviso 1975 JUN 11 13:00:00.167 NTS-YF 37.11178 -116.07370 U2du -183 1261 UG-S SE 0 20 LLNL 1,2,5

848 Bedrock Futtock 1975 JUN 18 11:49:00.092 NTS-YF 37.06564 -116.02196 U3eh -186.56 1221 UG-S SE 0 20 LANL 1,2,5

849 Bedrock Mast 1975 JUN 19 13:00:00.09 NTS-PM 37.35035 -116.32022 U19u -910.7 2068 UG-S WR 200 1000 520 S 520 6.10 LANL 1,2,5,7,q

850 Bedrock Camembert 1975 JUN 26 12:30:00.161 NTS-PM 37.27893 -116.36858 U19q -1310.64 2033 UG-S WR 200 1000 750 S 750 6.20 LLNL 1,2,5,7,q

851 Anvil Marsh 1975 SEP 6 17:00:00.113 NTS-YF 37.02365 -116.02831 U3kb -427.21 1187 UG-S WR 0 20 7 S 7 4.60 210 LANL 1,2,5,q,af

852 Anvil Husky Pup 1975 OCT 24 17:11:26.093 NTS-RM 37.22164 -116.17969 U12t.03 -327.96 2036 UG-T WE 0 20 15 S 15 4.70 LLNL 1,2,5,7,q

853 Anvil Kasseri 1975 OCT 28 14:30:00.16 NTS-PM 37.29005 -116.41155 U20z -1264.92 1957 UG-S WR 200 1000 1200 S 1000 6.40 V LLNL 1,2,5,7,8,q

854 Anvil Deck 1975 NOV 18 15:30:00.113 NTS-YF 37.02031 -116.02063 U3kd -326.14 1185 UG-S WR 0 20 5 4.40 170 LANL 1,2,5,af

855 Anvil Inlet 1975 NOV 20 15:00:00.093 NTS-PM 37.22496 -116.36756 U19f -818.33 2025 UG-S WR 200 1000 500 S 500 6.00 LANL 1,2,5,7,q

856 Anvil Leyden 1975 NOV 26 15:30:00.163 NTS-YF 37.11726 -116.01888 U9cm -326.11 1303 UG-S WR 0 20 5 S 5 5.00 LLNL 1,2,5,7,q

857 Anvil Chiberta 1975 DEC 20 20:00:00.164 NTS-YF 37.12765 -116.06157 U2ek -716 1264 UG-S WR 20 200 160 S 160 5.70 350 LLNL 1,2,5,q,af

858 Anvil Muenster 1976 JAN 3 19:15:00.162 NTS-PM 37.29655 -116.33319 U19e -1452.4 2082 UG-S WR 200 1000 800 S 800 6.20 LLNL 1,2,5,7,q

859 Anvil Keelson 1976 FEB 4 14:20:00.112 NTS-YF 37.06926 -116.03016 U7ai -639.62 1218 UG-S WR 20 200 180 S 150 5.80 380 LANL 1,2,5,q,af

860 Anvil Esrom 1976 FEB 4 14:40:00.163 NTS-YF 37.10659 -116.03742 U7ak -654.6 1258 UG-S WR 20 200 160 S 160 5.70 240 V 88 Ci LLNL 1,2,5,8,q,af

861 Anvil Fontina 1976 FEB 12 14:45:00.163 NTS-PM 37.27141 -116.48844 U20f -1219 1837 UG-S WR 200 1000 900 S 900 6.30 LLNL 1,2,5,7,q

862 Anvil Cheshire 1976 FEB 14 11:30:00.162 NTS-PM 37.24264 -116.42021 U20n -1167 1947 UG-S WR 200 500 350 S 350 6.00 LLNL 1,2,5,7,q

863 Anvil Shallows 1976 FEB 26 14:50:00.091 NTS-YF 37.02852 -116.01577 U3jf -244.85 1188 UG-S WR 0 20 2.5 4.20 150 V LANL 1,2,5,8,af

864 Anvil Estuary 1976 MAR 9 14:00:00.094 NTS-PM 37.30996 -116.36422 U19g -856.79 2025 UG-S WR 200 500 350 S 350 6.00 LANL 1,2,5,7,q

865 Anvil Colby 1976 MAR 14 12:30:00.163 NTS-PM 37.30599 -116.47148 U20aa -1273.4 1904 UG-S WR 500 1000 800 S 800 6.30 V 44 Ci LLNL 1,2,5,7,8,q

866 Anvil Pool 1976 MAR 17 14:15:00.09 NTS-PM 37.25589 -116.32858 U19p -881.18 2076 UG-S WR 200 500 500 S 500 6.10 LANL 1,2,5,7,q

867 Anvil Strait 1976 MAR 17 14:45:00.091 NTS-YF 37.10728 -116.05248 U4a -782.42 1243 UG-S WR 200 500 210 S 210 5.80 260 LANL 1,2,5,q,af

868 Anvil Mighty Epic 1976 MAY 12 19:50:00.17 NTS-RM 37.20910 -116.21250 U12n.10 -396.24 2224 UG-T WE 0 20 20 4.90 LLNL 1,2,5

869 Anvil Rivoli 1976 MAY 20 17:30:00.162 NTS-YF 37.13720 -116.06658 U2eg -199.64 1279 UG-S WR 0 20 0.6 3.70 V LLNL 1,2,5,7,8

870 Anvil Billet 1976 JUL 27 20:30:00.079 NTS-YF 37.07537 -116.04382 U7an -636.57 1222 UG-S WR 20 150 58 S 58 5.30 V LANL 1,2,5,8,q

871 Fulcrum Gouda 1976 OCT 6 14:30:00.164 NTS-YF 37.13456 -116.06228 U2ef -200.1 1272 UG-S WR 0 20 0.6 3.70 LLNL 1,2,5,7

872 Fulcrum Sprit 1976 NOV 10 14:58:00.077 NTS-YF 37.03595 -116.01742 U3hc -183.18 1192 UG-S WR 0 20 LANL 1,2,5

873 Fulcrum Chevre 1976 NOV 23 15:15:00.163 NTS-YF 37.17171 -116.05267 ? U10ay -317.3 1278 UG-S WR 0 20 2 70 LLNL 1,2,5,af

874 Fulcrum Redmud 1976 DEC 8 14:49:30.083 NTS-YF 37.07926 -116.00162 U7ab -426.72 1269 UG-S WR 0 20 20 4.90 LANL 1,2,5

875 Fulcrum Asiago 1976 DEC 21 15:09:00.166 NTS-YF 37.12391 -116.06746 U2ar -330.8 1265 UG-S WR 0 20 11 170 LLNL 1,2,5,af

876 Fulcrum Sutter 1976 DEC 21 15:58:00.162 NTS-YF 37.15190 -116.06343 U2bw -200.3 1287 UG-S WR 0 20 LLNL 1,2,5

877 Fulcrum Rudder 1976 DEC 28 18:00:00.076 NTS-YF 37.10049 -116.03646 U7aj(s) -638.56 1255 UG-S WR 20 150 89 S 89 5.50 350 LANL 1,2,5,q,af

878 Fulcrum Cove S 1977 FEB 16 17:53:00.16 NTS-YF 37.00700 -116.03200 U3ki 1181 UG-S WR 0 20 3 80 LANL 1,2,5,af

879 Fulcrum Oarlock SS 1977 FEB 16 17:53:00.073 NTS-YF 37.01349 -116.02857 U3km -317.6 1183 UG-S WR 0 20 8 4.60 160 LANL 1,2,5,af

880 Fulcrum Dofino S 1977 MAR 8 14:24:00.164 NTS-YF 37.17619 -116.05295 U10ba -182.88 1283 UG-S WR 0 20 0.8 3.80 V 25 Ci LLNL 1,2,5,7,8

881 Fulcrum Dofino-Lawton SS 1977 MAR 8 14:24:00.16 NTS-YF 37.17619 -116.05295 U10ba -282 1283 UG-S WR 0 20 V LLNL 1,2,5,8

882 Fulcrum Marsilly 1977 APR 5 15:00:00.167 NTS-YF 37.12023 -116.06228 U2ei -689.73 1259 UG-S WR 20 150 140 S 140 5.60 320 V 15 Ci LLNL 1,2,5,8,q,af

883 Fulcrum Bulkhead 1977 APR 27 15:00:00.084 NTS-YF 37.09479 -116.02788 U7am -594.36 1259 UG-S WR 20 150 67 S 67 5.40 LANL 1,2,5,q

884 Fulcrum Crewline 1977 MAY 25 17:00:00.076 NTS-YF 37.09433 -116.04486 U7ap -564.18 1237 UG-S WR 20 150 51 S 51 5.30 LANL 1,2,5,q

885 Fulcrum Forefoot 1977 JUN 2 17:15:00.098 NTS-YF 37.05494 -116.02496 U3kf -193.55 1207 UG-S WR 0 20 LANL 1,2,5

886 Fulcrum Carnelian 1977 JUL 28 14:07:00.162 NTS-YF 37.09758 -116.10397 ? U4af -208 1265 UG-S WR 0 20 0.6 3.70 V 7 Ci LLNL 1,2,5,7,8

887 Fulcrum Strake 1977 AUG 4 16:40:00.074 NTS-YF 37.08657 -116.00687 U7ae -517.55 1273 UG-S WR 20 150 44 S 44 5.10 LANL 1,2,5,q

888 Fulcrum Gruyere S 1977 AUG 16 14:41:00.165 NTS-YF 37.14516 -116.04909 U9cg -206.96 1263 UG-S WR 0 20 SL? LLNL 1,2,5,7

889 Fulcrum Gruyere-Gradino SS 1977 AUG 16 14:41:00.16 NTS-YF 37.14516 -116.04909 U9cg -320 1263 UG-S WR 0 20 0.6 3.70 V 0.8 Ci LLNL 1,2,5,8

890 Fulcrum Flotost 1977 AUG 16 15:49:00.168 NTS-YF 37.14672 -116.06311 U2ao -274.93 1284 UG-S WR 0 20 1.5 4.00 V 3 Ci LLNL 1,2,5,7,8

891 Fulcrum Scupper 1977 AUG 19 17:32:00.098 NTS-YF 37.01762 -116.03161 U3hj -449.58 1185 UG-S WR 0 20 0.2 S 0.2 3.30 LANL 1,2,5,7,q

892 Fulcrum Scantling 1977 AUG 19 17:55:00.10 NTS-YF 37.11003 -116.05451 U4h -701.04 1246 UG-S WR 20 150 120 S 120 5.60 260 LANL 1,2,5,q,af

893 Fulcrum Ebbtide 1977 SEP 15 14:36:30.077 NTS-YF 37.03279 -116.04314 U3kt -379.48 1194 UG-S WR 0 20 6 4.50 150 LANL 1,2,5,af

894 Fulcrum Coulommiers 1977 SEP 27 14:00:00.161 NTS-YF 37.15117 -116.06756 U2ei -530.35 1292 UG-S WR 20 150 12 S 20 4.80 230 V 0.9 Ci LLNL 1,2,5,8,q,af

895 Cresset Bobstay 1977 OCT 26 14:15:00.08 NTS-YF 37.00760 -116.01670 U3jb -381.3 1180 UG-S WR 0 20 5 S 5 4.40 170 V LANL 1,2,5,8,q,af

896 Cresset Hybla Gold 1977 NOV 1 18:06:00.07 NTS-RM 37.18780 -116.21300 U12e.20 -384.99 2239 UG-T WE 0 20 10 4.70 V LANL 1,2,5,8

897 Cresset Sandreef 1977 NOV 9 22:00:00.075 NTS-YF 37.07211 -116.05001 U7aq -700.74 1221 UG-S WR 20 150 210 S 150 5.80 280 LANL 1,2,5,q,af

898 Cresset Seamount 1977 NOV 17 19:30:00.077 NTS-YF 37.02061 -116.02508 U3kp -370.09 1186 UG-S WR 0 20 10 4.70 200 LANL 1,2,5,af

899 Cresset Rib 1977 DEC 14 15:00:00.17 NTS-YF 37.01755 -116.01791 U3jv -212.84 1184 UG-S WR 0 20 0.8 3.80 100 LANL 1,2,5,7,af

900 Cresset Farallones 1977 DEC 14 15:30:00.07 NTS-YF 37.13587 -116.08603 T? U3fa -668 1290 UG-S WR 20 150 180 S 150 5.70 300 V 1 Ci LLNL 1,2,5,8,q,af

901 Cresset Campos 1978 FEB 13 21:53:00.162 NTS-YF 37.12612 -116.03174 U9cp -319.6 1269 UG-S WR 0 20 0.8 3.80 V 1.3 kCi LLNL 1,2,5,8

902 Cresset Reblochon 1978 FEB 23 17:00:00.164 NTS-YF 37.12368 -116.06383 U2en -658.4 1261 UG-S WR 20 150 120 S 120 5.60 V 36 Ci LLNL 1,2,5,8,q

903 Cresset Karab 1978 MAR 16 15:00:00.07 NTS-YF 37.08517 -116.08162 U4ah -331 1247 UG-S WR 0 20 1.5 4.00 V LLNL 1,2,5,8

904 Cresset Topmast 1978 MAR 23 16:30:00.114 NTS-YF 37.09886 -116.01962 U7ay -457.81 1282 UG-S WR 0 20 LANL 1,2,5

905 Cresset Iceberg 1978 MAR 23 16:30:00.20 NTS-YF 37.10180 -116.05110 U4g -640.29 1239 UG-S WR 20 150 120 S 120 5.60 230 LANL 1,2,5,q,af

906 Cresset Backbeach 1978 APR 11 17:45:00.073 NTS-PM 37.23349 -116.36847 U19x -671.78 2040 UG-S WR 20 150 100 5.50 LANL 1,2,5

907 Cresset Asco 1978 APR 25 14:35:00.162 NTS-YF 37.15457 -116.03476 U10bc -183 1285 UG-S SE 0 20 LLNL 1,2,5

908 Cresset Transom 1978 MAY 10 15:00:00.07 NTS-YF 37.08778 -116.05263 U4f -640 1231 UG-S WR 0 0 LANL 1,2,5,af

909 Cresset Jackpots 1978 JUN 1 17:00:00.075 NTS-YF 37.02065 -116.03193 U3kj -304.22 1186 UG-S WR 0 20 0.6 3.70 LANL 1,2,5,7

910 Cresset Satz 1978 JUL 7 14:00:00.167 NTS-YF 37.11179 -116.07713 U2dq -315 1263 UG-S WR 0 20 1.5 4.00 80 V LLNL 1,2,5,8,af

911 Cresset Lowball 1978 JUL 12 17:00:00.08 NTS-YF 37.07870 -116.04380 U7av -564.88 1225 UG-S WR 20 150 120 S 99 5.60 200 LANL 1,2,5,q,af

912 Cresset Panir 1978 AUG 31 14:00:00.164 NTS-PM 37.27593 -116.35734 U19ys -681 2013 UG-S WR 20 150 140 5.60 LLNL 1,2,5

913 Cresset Diablo Hawk 1978 SEP 13 15:15:00.16 NTS-RM 37.20880 -116.21080 U12n.10a -388 2212 UG-T WE 0 20 8 4.60 LLNL 1,2,5

914 Cresset Cremino S 1978 SEP 27 16:30:00.165 NTS-YF 37.17101 -116.08716 U8e -210 1341 UG-S WR 0 20 0.25 3.40 LLNL 1,2,5,7

915 Cresset Cremino-Caerphilly SS 1978 SEP 27 16:30:00.17 NTS-YF 37.17101 -116.08716 U8e 1341 UG-S WR 0 20 LLNL 1,2,5

916 Cresset Draughts 1978 SEP 27 17:00:00.071 NTS-YF 37.07387 -116.01983 U7al -441.59 1234 UG-S WR 20 150 25 S 25 5.00 240 LANL 1,2,5,q,af

917 Cresset Rummy 1978 SEP 27 17:20:00.076 NTS-YF 37.07980 -116.05132 U7au -639.78 1226 UG-S WR 20 150 210 S 150 5.80 320 LANL 1,2,5,q,af

918 Quicksilver Emmenthal 1978 NOV 2 15:25:00.169 NTS-PM 37.28794 -116.29749 U19t -576.1 2104 UG-S WR 0 20 2.5 4.20 LLNL 1,2,5

919 Quicksilver Concentration 1978 DEC 1 17:07:30.073 NTS-YF 37.02967 -116.02413 U3kn -247.59 1189 UG-S WR 0 20 0.6 3.70 80 LANL 1,2,5,7,af

920 Quicksilver Farm 1978 DEC 16 15:30:00.158 NTS-PM 37.27339 -116.41028 U20ab -689 1979 UG-S WR 20 150 140 5.60 V LLNL 1,2,5,8

921 Quicksilver Baccarat 1979 JAN 24 18:00:00.10 NTS-YF 37.10540 -116.01170 U7ax -326.44 1311 UG-S WR 0 20 6 4.50 LANL 1,2,5

922 Quicksilver Quinella 1979 FEB 8 20:00:00.089 NTS-YF 37.10248 -116.05484 U4l -579.1 1241 UG-S WR 20 150 89 S 89 5.50 240 LANL 1,2,5,q,af

923 Quicksilver Kloster 1979 FEB 15 18:05:00.165 NTS-YF 37.15201 -116.07184 U2eo -536.4 1297 UG-S WR 20 150 16 S 20 4.90 90 V LLNL 1,2,5,8,q,af

924 Quicksilver Memory 1979 MAR 14 18:30:00.095 NTS-YF 37.02783 -116.03975 U3kg -364.85 1190 UG-S WR 0 20 5 4.40 LANL 1,2,5

925 Quicksilver Freezeout 1979 MAY 11 16:00:00.102 NTS-YF 36.99818 -116.01774 U3kw -335.3 1177 UG-S WR 0 20 5 4.40 150 LANL 1,2,5,7,af

926 Quicksilver Pepato 1979 JUN 11 14:00:00.17 NTS-PM 37.28969 -116.45525 U20ad -681 1913 UG-S WR 20 150 100 5.50 V LLNL 1,2,5,8

927 Quicksilver Chess 1979 JUN 20 15:00:13.542 NTS-YF 37.10763 -116.01509 U7at -335.3 1309 UG-S WR 0 20 1.5 4.00 LANL 1,2,5

928 Quicksilver Fajy 1979 JUN 28 14:44:00.167 NTS-YF 37.14330 -116.08752 U2fc -536 1303 UG-S WR 20 150 22 S 22 5.00 250 V LLNL 1,2,5,8,q,af

929 Quicksilver Burzet 1979 AUG 3 15:07:30.164 NTS-YF 37.08395 -116.06989 U4ai -450 1235 UG-S WR 20 150 7 S 20 4.60 170 V LLNL 1,2,5,8,q,af

930 Quicksilver Offshore 1979 AUG 8 15:00:00.112 NTS-YF 37.01475 -116.00801 U3ks -396.54 1182 UG-S WR 20 150 14 S 20 4.90 210 LANL 1,2,5,q,af

931 Quicksilver Hearts 1979 SEP 6 15:00:00.089 NTS-YF 37.08811 -116.05278 U4n -640.02 1232 UG-S WR 140 210 S 140 5.80 300 LANL 1,2,5,q,af

932 Quicksilver Pera 1979 SEP 8 17:02:00.09 NTS-YF 37.15500 -116.03900 ? U10bd -200 1280 UG-S WR 0 20 5 120 LLNL 1,2,5,af

933 Quicksilver Sheepshead 1979 SEP 26 15:00:00.091 NTS-PM 37.22906 -116.36405 U19aa -640 2033 UG-S WR 20 150 140 5.60 LANL 1,2,5

934 Tinderbox Backgammon 1979 NOV 29 15:00:00.096 NTS-YF 36.99396 -116.02411 U3jh -228.72 1175 UG-S WR 0 20 0.8 3.80 150 LANL 1,2,5,af

935 Tinderbox Azul 1979 DEC 14 18:00:00.09 NTS-YF 37.13737 -116.06307 U2em -205 1275 UG-S WR 0 20 LLNL 1,2,5

936 Tinderbox Tarko 1980 FEB 28 15:00:00.093 NTS-YF 37.12655 -116.08851 U2fd -369 1280 UG-S WR 0 20 5 4.40 100 V 50 Ci LLNL 1,2,5,8,af

937 Tinderbox Norbo 1980 MAR 8 15:35:00.09 NTS-YF 37.17994 -116.08311 U8c -271 1349 UG-S WR 0 20 1 3.90 V LLNL 1,2,5,8

938 Tinderbox Liptauer 1980 APR 3 14:00:00.089 NTS-YF 37.14988 -116.08226 U2eh -417 1304 UG-S WR 20 150 20 4.80 170 LLNL 1,2,5,af

939 Tinderbox Pyramid 1980 APR 16 20:00:00.089 NTS-YF 37.10112 -116.03053 U7be -579.1 1266 UG-S WR 20 150 89 S 89 5.30 150 LANL 1,2,5,q,af

940 Tinderbox Canfield 1980 MAY 2 18:46:30.092 NTS-YF 37.05601 -116.01895 U3kx -350.5 1211 UG-S WR 0 20 6 4.50 200 LANL 1,2,5,af

941 Tinderbox Flora 1980 MAY 22 13:00:00.089 NTS-YF 37.00306 -116.03139 U3lg -335.6 1179 UG-S WR 0 20 V 1 kCi LANL 1,2,5,8

942 Tinderbox Kash 1980 JUN 12 17:15:00.09 NTS-PM 37.28166 -116.45385 U20af -645 1911 UG-S WR 20 150 140 5.60 V LLNL 1,2,5,8

943 Tinderbox Huron King 1980 JUN 24 15:10:00.07 NTS-YF 37.02330 -116.03410 U3ky -320.04 1187 UG-S WE 0 20 6 4.50 140 LANL 1,2,5,af

944 Tinderbox Tafi 1980 JUL 25 19:05:00.082 NTS-PM 37.25633 -116.47740 U20ae -680 1859 UG-S WR 20 150 140 5.60 V LLNL 1,2,5,8

945 Tinderbox Verdello 1980 JUL 31 18:19:00.092 NTS-YF 37.01304 -116.02275 U3ku -365.76 1183 UG-S WR 0 20 3.5 4.30 150 V 45 Ci LANL 1,2,5,8,af

946 Tinderbox Bonarda 1980 SEP 25 14:45:00.094 NTS-YF 37.05616 -116.04809 U3gv -381 1209 UG-S WR 20 150 20 4.60 90 LANL 1,2,5,af

947 Tinderbox Riola 1980 SEP 25 15:26:30.084 NTS-YF 37.11586 -116.06457 U2eq -424 1254 UG-S WR 1.07 0.5 S 1.07 V 2.2 kCi LLNL 1,2,5,8,q

948 Guardian Miners Iron 1980 OCT 31 18:00:00.09 NTS-RM 37.21130 -116.20540 U12n.11 -389.5 2212 UG-T WE 0 20 10 4.70 V 0.3 Ci LANL 1,2,5,8

949 Guardian Dauphin 1980 NOV 14 16:50:00.084 NTS-YF 37.11149 -116.01866 U9cq -320 1306 UG-S WR 0 20 2 4.10 80 LLNL 1,2,5,af

950 Guardian Baseball 1981 JAN 15 20:25:00.09 NTS-YF 37.08709 -116.04475 U7ba -563.88 1232 UG-S WR 20 150 160 S 99 5.70 150 LANL 1,2,5,q,af

951 Guardian Clairette 1981 FEB 5 18:00:00.117 NTS-YF 37.01089 -116.03218 U3kr -353.6 1182 UG-S WR 0 20 LANL 1,2,5

952 Guardian Seco 1981 FEB 25 15:00:00.082 NTS-YF 37.18190 -116.08425 U8l -200 1356 UG-S WR 0 20 LLNL 1,2,5

953 Guardian Vide 1981 APR 30 14:35:00.084 NTS-YF 37.17733 -116.08476 U8k -323 1346 UG-S WR 0 20 V 3 Ci LLNL 1,2,5,8

954 Guardian Aligote 1981 MAY 29 16:00:00.094 NTS-YF 37.10184 -116.00406 ?? U7bg -320 1311 UG-S WR 0 20 2.5 4.20 LANL 1,2,5

955 Guardian Harzer 1981 JUN 6 18:00:00.084 NTS-PM 37.30340 -116.32560 U19aj -637 2073 UG-S WR 20 150 140 5.60 LLNL 1,2,5

956 Guardian Niza 1981 JUL 10 14:00:00.096 NTS-YF 37.12860 -116.03378 U9cr -341 1266 UG-S WR 0 20 4 110 V LLNL 1,2,5,8,af

957 Guardian Pineau 1981 JUL 16 15:00:00.096 NTS-YF 37.08870 -116.01937 U7ao -207.26 1259 UG-S WR 0 20 LANL 1,2,5

958 Guardian Havarti 1981 AUG 5 13:41:00.086 NTS-YF 37.15374 -116.03508 U10bg -200 1283 UG-S WR 0 20 LLNL 1,2,5

959 Guardian Islay 1981 AUG 27 14:31:00.088 NTS-YF 37.16042 -116.06652 U2er -294 1297 UG-S WR 0 20 4 100 V 700 Ci LLNL 1,2,5,8,af

960 Guardian Trebbiano 1981 SEP 4 15:00:00.103 NTS-YF 37.05809 -116.04807 U3lj -305.4 1211 UG-S WR 0 20 1 30 V 200 Ci LANL 1,2,5,8,af

961 Guardian Cernada 1981 SEP 24 15:00:00.089 NTS-YF 37.00852 -116.02380 U3kk -213.2 1181 UG-S WR 0 20 LANL 1,2,5

962 Praetorian Paliza 1981 OCT 1 19:00:00.10 NTS-YF 37.08160 -116.00880 U7bd -472.1 1260 UG-S WR 20 150 38 S 38 5.10 260 LANL 1,2,5,q,af

963 Praetorian Tilci 1981 NOV 11 20:00:09.086 NTS-YF 37.07632 -116.06849 U4ak -445 1232 UG-S WR 20 150 29 S 29 4.90 200 V LANL 1,2,5,8,q,af

964 Praetorian Akavi 1981 DEC 3 15:00:00.098 NTS-YF 37.14843 -116.07084 U2es -494 1293 UG-S WR 20 150 12 S 20 4.80 170 V LLNL 1,2,5,8,q,af

965 Praetorian Caboc 1981 DEC 16 21:05:00.09 NTS-YF 37.11450 -116.12290 U2cp -335 1348 UG-S WR 0 20 5 4.40 V 0.3 Ci LLNL 1,2,5,8

966 Praetorian Jornada 1982 JAN 28 16:00:00.104 NTS-YF 37.09134 -116.05123 U4j -638.9 1233 UG-S WR 139 150 280 S 139 5.90 300 LANL 1,2,5,q,af

967 Praetorian Molbo 1982 FEB 12 14:55:00.083 NTS-PM 37.22433 -116.46265 U20ag -638 1873 UG-S WR 20 150 80 5.40 V LLNL 1,2,5,8

968 Praetorian Hosta 1982 FEB 12 15:25:00.09 NTS-PM 37.34800 -116.31610 U19ak -639.5 2076 UG-S WR 20 150 140 5.60 LANL 1,2,5

969 Praetorian Tenaja 1982 APR 17 18:00:00.088 NTS-YF 37.01682 -116.00987 U3lh -356.3 1177 UG-S WR 0 20 6 4.50 190 LANL 1,2,5,af

970 Praetorian Kryddost 1982 MAY 6 20:00:00.083 NTS-YF 37.11684 -116.12691 U2co -335 1363 UG-S WR 0 20 3.5 4.30 LLNL 1,2,5

971 Praetorian Bouschet 1982 MAY 7 18:17:00.11 NTS-YF 37.06906 -116.04546 U3la -563.9 1217 UG-S WR 20 150 160 S 99 5.70 190 V <1 Ci LANL 1,2,5,8,q,af

972 Praetorian Kesti 1982 JUN 16 14:00:00.085 NTS-YF 37.11423 -116.01658 U9cn -289 1312 UG-S WR 0 20 LLNL 1,2,5

973 Praetorian Nebbiolo 1982 JUN 24 14:15:00.09 NTS-PM 37.23622 -116.37018 U19ae -639.5 2038 UG-S WR 20 150 140 5.60 LANL 1,2,5

974 Praetorian Monterey 1982 JUL 29 20:05:00.083 NTS-YF 37.10231 -116.07497 U4aj -400 1253 H-12UG-S WR 20 150 9 S 20 4.50 60 V 0.1 Ci LLNL 1,2,5,8,q,af

975 Praetorian Atrisco 1982 AUG 5 14:00:00.09 NTS-YF 37.08420 -116.00655 U7bp -639.78 1268 UG-S WR 138 150 210 S 138 5.70 320 LANL 1,2,5,q,af

976 Praetorian Queso 1982 AUG 11 15:00:00.00 NTS-YF 37.18979 -116.04768 U10bf -216 1310 H-70UG-S WR 0 20 LLNL 1,2,5

977 Praetorian Cerro 1982 SEP 2 14:00:00.085 NTS-YF 37.01974 -116.01566 U3lf -228.6 1184 H-70UG-S WR 0 20 LANL 1,2,5

978 Praetorian Huron Landing 1982 SEP 23 16:00:00.09 NTS-RM 37.21200 -116.20680 U12n.15 -408 1824 H-12UG-T WE 0 20 20 4.90 V 280 Ci LLNL/LANL1,2,5,8

979 Praetorian Diamond Ace 1982 SEP 23 16:00:00.091 NTS-RM 37.21202 -116.20677 U12n.15 -407.26 1824 UG-T WE 0 20 V LLNL/LANL1,2,5,8

980 Praetorian Frisco 1982 SEP 23 17:00:00.085 NTS-YF 37.17475 -116.08779 U8m -451 1347 H-14UG-S WR 20 150 20 4.90 V 2 Ci LLNL 1,2,5,8

981 Praetorian Borrego 1982 SEP 29 13:30:00.096 NTS-YF 37.09131 -116.04489 U7br -563.3 1234 H-17UG-S WR 0 150 1 S 1 LANL 1,2,5,q

982 Phalanx Seyval 1982 NOV 12 19:17:00.10 NTS-YF 37.02370 -116.03210 U3lm -366.06 1187 UG-S WR 0 20 5 4.40 LANL 1,2,5

983 Phalanx Manteca 1982 DEC 10 15:20:00.09 NTS-YF 37.03020 -116.07190 ?? U4al -413 1236 UG-S WR 20 150 12 S 20 4.80 V 78 Ci LLNL 1,2,5,8,q

984 Phalanx Coalora 1983 FEB 11 16:00:00.10 NTS-YF 37.05060 -116.04530 U3lo -274 1210 UG-S WR 0 20 LANL 1,2,5

985 Phalanx Cheedam 1983 FEB 17 17:00:00.09 NTS-YF 37.16280 -116.06330 U2et -343 1293 UG-S WR 0 20 1.5 4.00 110 V 0.2 Ci LLNL 1,2,5,8,af

986 Phalanx Cabra 1983 MAR 26 20:20:00.09 NTS-PM 37.30070 -116.46000 U20aj -542.5 1907 UG-S WR 20 150 45 5.20 LLNL 1,2,5

987 Phalanx Turquoise 1983 APR 14 19:05:00.12 NTS-YF 37.07280 -116.04600 U7bu -533.1 1219 UG-S WR 0 150 210 S 84 5.70 170 V LANL 1,2,5,8,q,af

988 Phalanx Crowdie 1983 MAY 5 15:20:00.08 NTS-YF 37.14600 -116.09000 ?? U2fe -390 1309 UG-S WR 0 20 6 4.50 80 V 7 Ci LLNL 1,2,5,8,af

989 Phalanx Mini Jade 1983 MAY 26 14:30:00.09 NTS-RM 37.20900 -116.20600 U12n.12 -379.2 1828 UG-TC WE 0 20 4 S 4 V 1 Ci LANL 1,2,5,7,8,q

990 Phalanx Fahada 1983 MAY 26 15:00:00.09 NTS-YF 37.10290 -116.00570 U7bh -384.4 1312 UG-S WR 0 20 6 4.50 LANL 1,2,5

991 Phalanx Danablu 1983 JUN 9 17:10:00.088 NTS-YF 37.15762 -116.08923 U2eu -320 1327 UG-S WR 0 20 6 4.50 110 V LLNL 1,2,5,8,af

992 Phalanx Laban 1983 AUG 3 13:33:00.10 NTS-YF 37.11900 -116.08890 U2ff -326 1276 UG-S WR 0 20 2.5 4.20 50 V 51 Ci LLNL 1,2,5,8,af

993 Phalanx Sabado 1983 AUG 11 14:00:00.12 NTS-YF 36.99770 -116.00270 U3lc -320 1175 UG-S WR 0 20 5 4.40 LANL 1,2,5

994 Phalanx Jarlsberg 1983 AUG 27 14:00:00.09 NTS-YF 37.19300 -116.03500 U10ca -200 1318 UG-S WR 0 20 2 4.10 V LLNL 1,2,5,8

995 Phalanx Chancellor 1983 SEP 1 14:00:00.08 NTS-PM 37.27280 -116.35500 U19ad -623.6 2013 UG-S WR 143 143 5.50 LANL 1,2,5

996 Phalanx Tomme/Midnight Zephyr 1983 SEP 21 15:00:00.09 NTS-RM 37.20970 -116.20930 U12n.18 -404.8 2230 UG-T WE 0 20 LLNL 1,2,5

997 Phalanx Branco S 1983 SEP 21 16:25:00.08 NTS-YF 37.12100 -116.05600 U2ew -293 1256 UG-S WR 0 20 0.6 3.70 LLNL 1,2,5,7

998 Phalanx Branco-Herkimer SS 1983 SEP 21 16:25:00.08 NTS-YF 37.12100 -116.05600 U2ew 1256 UG-S WR 0 20 2 S 2 LLNL 1,2,5,q

999 Phalanx Techado 1983 SEP 22 15:00:00.12 NTS-YF 37.10560 -116.04940 U4o -532.5 1241 UG-S WR 0 150 2 S 2 LANL 1,2,5,q

1000 Phalanx Navata 1983 SEP 29 15:00:00.09 NTS-YF 37.05300 -116.02100 U3lb -182.9 1207 UG-S SE 0 20 LANL 1,2,5

1001 Fusileer Muggins 1983 DEC 9 16:00:00.11 NTS-YF 37.01300 -116.04700 U3ls -243.84 1188 UG-S WR 0 20 1.5 4.00 90 LANL 1,2,5,7,af

1002 Fusileer Romano 1983 DEC 16 18:30:00.09 NTS-YF 37.14050 -116.07210 U2ex -515 1287 UG-S WR 20 150 29 S 29 5.20 230 V LLNL 1,2,5,8,q,af

1003 Fusileer Gorbea 1984 JAN 31 15:30:00.085 NTS-YF 37.11270 -116.12170 U2cq -388 1344 UG-S WR 20 150 20 4.10 V 12 Ci LLNL 1,2,5,8

1004 Fusileer Midas Myth/Milagro 1984 FEB 15 17:00:00.11 NTS-RM 37.22140 -116.18110 U12t.04 -360.9 2044 UG-T WE 0 20 20 5.10 LANL 1,2,5

1005 Fusileer Tortugas 1984 MAR 1 17:45:00.09 NTS-YF 37.06580 -116.04630 U3gg -638.6 1216 UG-S WR 20 150 230 S 150 5.90 250 LANL 1,2,5,q,af

1006 Fusileer Agrini 1984 MAR 31 14:30:00.084 NTS-YF 37.14644 -116.08406 ?? U2ev -320 1304 UG-S WR 0 20 6 4.50 40 V 690 Ci LLNL 1,2,5,8,af

1007 Fusileer Orkney 1984 MAY 2 13:50:00.09 NTS-YF 37.19848 -116.05397 U10be -210 1351 UG-S WR 0 20 0.25 3.40 V 0.5 Ci LLNL 1,2,5,7,8

1008 Fusileer Bellow 1984 MAY 16 16:00:00.085 NTS-YF 37.09251 -116.09322 U4ac -207.3 1266 UG-S WR 0 20 0.8 3.80 LLNL 1,2,5,7

1009 Fusileer Caprock 1984 MAY 31 13:04:00.102 NTS-YF 37.10313 -116.04805 U4q -599.85 1237 UG-S WR 20 150 210 S 120 5.80 240 V 0.1 Ci LANL 1,2,5,8,q,af

1010 Fusileer Duoro 1984 JUN 20 15:15:00.088 NTS-YF 37.00038 -116.04306 U3lv -379.78 1180 UG-S WR 20 150 8 S 20 4.70 180 LANL 1,2,5,q,af

1011 Fusileer Normanna 1984 JUL 12 14:00:00.087 NTS-YF 37.19199 -116.03438 U10cb -200 1315 UG-S WR 0 20 0.5 3.60 LLNL 1,2,5

1012 Fusileer Kappeli 1984 JUL 25 15:30:00.084 NTS-PM 37.26777 -116.41064 U20am -640 1982 UG-S WR 20 150 80 5.40 V 12 Ci LLNL 1,2,5,8

1013 Fusileer Correo 1984 AUG 2 15:00:00.09 NTS-YF 37.01710 -116.00760 U3lw -334.1 1182 UG-S WR 0 20 10 4.70 140 LANL 1,2,5,af

1014 Fusileer Wexford 1984 AUG 30 14:45:00.00 NTS-YF 37.14389 -116.12526 U2cr -314 1376 UG-S WR 0 20 LLNL 1,2,5

1015 Fusileer Dolcetto 1984 AUG 30 14:45:00.102 NTS-YF 37.08979 -115.99937 U7bi -365.15 1291 UG-S WR 0 20 20 4.90 LANL 1,2,5

1016 Fusileer Breton 1984 SEP 13 14:00:00.00 NTS-YF 37.08669 -116.07118 U4ar -483.11 1238 UG-S WR 20 150 33 S 33 5.00 230 V 4 Ci LLNL 1,2,5,8,q,af

1017 Grenadier Vermejo 1984 OCT 2 18:14:00.103 NTS-YF 37.08523 -116.05281 U4r -350.22 1229 UG-S WR 0 20 2.5 4.20 LANL 1,2,5

1018 Grenadier Villita 1984 NOV 10 16:40:00.09 NTS-YF 37.00010 -116.01740 U3ld -372.2 1177 UG-S WR 0 20 5 S 5 4.50 160 LANL 1,2,5,q,af

1019 Grenadier Tierra 1984 DEC 15 14:45:00.00 NTS-PM 37.28136 -116.30541 U19ac -640 2118 UG-S WR 20 150 80 5.40 V 600 Ci LLNL 1,2,5,8

1020 Grenadier Minero 1984 DEC 20 16:20:00.11 NTS-YF 37.01200 -116.04600 ? U3lt -244.8 1187 UG-S WR 0 20 2.5 4.20 LANL 1,2,5

1021 Grenadier Vaughn 1985 MAR 15 16:31:00.10 NTS-YF 37.05810 -116.04530 U3lr -425.5 1211 UG-S WR 20 150 14 S 20 4.80 V 100 Ci LANL 1,2,5,8,q

1022 Grenadier Cottage 1985 MAR 23 18:30:00.082 NTS-YF 37.17998 -116.08896 U8j -515 1362 UG-S WR 20 150 60 5.30 290 LLNL 1,2,5,af

1023 Grenadier Hermosa 1985 APR 2 20:00:00.09 NTS-YF 37.09480 -116.03230 U7bs -638.25 1251 UG-S WR 20 150 180 S 150 5.80 390 LANL 1,2,5,q,af

1024 Grenadier Misty Rain 1985 APR 6 23:15:00.09 NTS-RM 37.20083 -116.20718 U12n.17 -388.6 2212 UG-T WE 0 20 15 4.80 V 63 Ci LLNL 1,2,5,8

1025 Grenadier Towanda 1985 MAY 2 15:20:00.083 NTS-PM 37.25341 -116.32521 U19ab -660.2 2085 UG-S WR 20 150 150 5.70 LANL 1,2,5

1026 Grenadier Salut 1985 JUN 12 15:15:00.082 NTS-PM 37.24786 -116.48906 U20ak -608.08 1873 UG-S WR 20 150 100 5.50 V 4 Ci LLNL 1,2,5,8

1027 Grenadier Ville 1985 JUN 12 17:30:00.088 NTS-YF 37.08831 -116.08394 U4am -293.2 1250 UG-S WR 0 20 8 4.60 V 0.1 Ci LLNL 1,2,5,8

1028 Grenadier Maribo 1985 JUN 26 18:03:00.08 NTS-YF 37.12410 -116.12199 U2cs -381 1352 UG-S WR 0 20 3.5 4.30 V 4 Ci LLNL 1,2,5,8

1029 Grenadier Serena 1985 JUL 25 14:00:00.088 NTS-PM 37.29725 -116.43807 U20an -597 1942 UG-S WR 20 150 45 5.20 V 3 Ci LLNL 1,2,5,8

1030 Grenadier Cebrero 1985 AUG 14 13:00:00.082 NTS-YF 37.11108 -116.01438 U9cw -183 1316 UG-S WR 0 20 V LLNL 1,2,5,8

1031 Grenadier Chamita 1985 AUG 17 16:25:00.09 NTS-YF 37.00230 -116.04300 U3lz -331.62 1181 UG-S WR 0 20 8 4.60 110 LANL 1,2,5,af

1032 Grenadier Ponil 1985 SEP 27 14:15:00.08 NTS-YF 37.08980 -116.00180 U7bv -364.8 1284 UG-S WR 0 20 10 4.70 LANL 1,2,5

1033 Charioteer Mill Yard 1985 OCT 9 20:40:00.128 NTS-RM 37.20916 -116.20512 U12n.20 -371 2203 UG-TC WE 0 200.075 0.075 V 6 Ci LANL 1,2,5,7,8

1034 Charioteer Diamond Beech 1985 OCT 9 23:20:00.086 NTS-RM 37.20967 -116.21009 U12n.19 -404.5 2230 UG-T WE 0 20 2.5 4.20 V 1 Ci LLNL 1,2,5,8

1035 Charioteer Roquefort 1985 OCT 16 21:35:00.086 NTS-YF 37.10995 -116.12138 U4as -415 1341 UG-S WR 20 150 8 S 20 4.70 V LLNL 1,2,5,8,q

1036 Charioteer Abo 1985 OCT 30 16:00:00.087 NTS-YF 37.05061 -116.03614 U3mc -196.29 1202 UG-S WR 0 20 0.01 0.01 V <30 Ci LANL 1,2,5,7,8

1037 Charioteer Goldstone 1985 DEC 28 19:01:00.089 NTS-PM 37.23781 -116.47274 U20ao -549 1887 UG-S WR 20 150 60 5.30 LLNL 1,2,5

1038 Charioteer Glencoe 1986 MAR 22 16:15:00.08 NTS-YF 37.08300 -116.06610 U4i -609.6 1233 UG-S WR 29 51 S 29 5.20 V 0.1 Ci LANL 1,2,5,8,q

1039 Charioteer Mighty Oak 1986 APR 10 14:08:30.095 NTS-RM 37.21833 -116.18311 U12t.08 -394.4 2084 UG-T WE 0 20 20 5.00 V 36 kCi LLNL 1,2,5,8

1040 Charioteer Mogollon 1986 APR 20 15:12:30.074 NTS-YF 37.01166 -116.04605 U3li -259.4 1187 UG-S WR 0 20 1.5 4.00 80 LANL 1,2,5,af

1041 Charioteer Jefferson 1986 APR 22 14:30:00.086 NTS-PM 37.26412 -116.44020 U20ai -609 1955 UG-S WR 20 150 80 5.40 V LLNL 1,2,5,8

1042 Charioteer Panamint 1986 MAY 21 13:59:00.083 NTS-YF 37.12503 -116.05944 U2gb -480 1259 UG-S WR 0 20 1 S 1 V 3 Ci LLNL 1,2,5,8,q

1043 Charioteer Tajo 1986 JUN 5 15:04:00.064 NTS-YF 37.09829 -116.01550 U7bl -518.2 1289 UG-S WR 20 150 67 S 67 5.40 320 LANL 1,2,5,q,af

1044 Charioteer Cybar 1986 JUL 17 21:00:00.06 NTS-PM 37.27870 -116.35560 U19ar -627 2017 UG-S WR 119 119 5.70 V LANL 1,2,5,8

1045 Charioteer Cornucopia 1986 JUL 24 15:05:00.086 NTS-YF 37.14275 -116.07112 U2ga(s) -381 1287 UG-S WR 0 20 8 4.60 110 V LLNL 1,2,5,8,af

1046 Charioteer Galveston 1986 SEP 4 16:09:00.057 NTS-PM 37.23973 -116.36776 U19af -487.1 2018 UG-S WR 0 20 0.35 3.50 LANL 1,2,5,7

1047 Charioteer Aleman 1986 SEP 11 14:57:00.11 NTS-YF 37.06908 -116.04969 U3kz -502.6 1218 UG-S WR 0 20 0.1 S 0.1 LANL 1,2,5,q

1048 Charioteer Labquark 1986 SEP 30 22:30:00.102 NTS-PM 37.30008 -116.30743 U19an -616 2100 UG-S WR 20 150 140 5.60 V 16 Ci LLNL 1,2,5,8

1049 Musketeer Belmont 1986 OCT 16 19:25:00.089 NTS-PM 37.22021 -116.46163 U20as -605.03 1871 UG-S WR 20 150 140 5.60 V 0.2 Ci LLNL 1,2,5,8

1050 Musketeer Gascon 1986 NOV 14 16:00:00.066 NTS-YF 37.10043 -116.04807 U4t -593.14 1236 UG-S WR 20 150 210 S 120 5.80 260 V LANL 1,2,5,8,q,af

1051 Musketeer Bodie 1986 DEC 13 17:50:05.093 NTS-PM 37.26296 -116.41168 U20ap -635 1991 UG-S WR 20 150 140 5.60 V 1 Ci LLNL 1,2,5,8

1052 Musketeer Hazebrook-Emerald (GS 1987 FEB 3 15:20:00.083 NTS-YF 37.18114 -116.04844 U10bh -186 1291 UG-S WR 0 20 V LLNL 1,2,5,8

1053 Musketeer Hazebrook-CheckerberSS 1987 FEB 3 15:20:00.08 NTS-YF 37.18114 -116.04844 U10bh -226 1291 UG-S WR 0 20 V LLNL 1,2,5,8

1054 Musketeer Hazebrook-Apricot (OSS 1987 FEB 3 15:20:00.08 NTS-YF 37.18114 -116.04844 U10bh -262 1291 UG-S SE 0 20 V LLNL 1,2,5,8

1055 Musketeer Tornero 1987 FEB 11 16:45:00.07 NTS-YF 37.01070 -116.04470 U3ll -298.4 1186 UG-S WR 0 20 6 4.50 90 LANL 1,2,5,af

1056 Musketeer Middle Note 1987 MAR 18 18:28:00.085 NTS-RM 37.21024 -116.20857 U12n.21 -398.7 2223 UG-T WE 0 20 3.5 4.30 LLNL 1,2,5

1057 Musketeer Delamar 1987 APR 18 13:40:00.00 NTS-PM 37.24789 -116.50914 U20at -544.1 1875 UG-S WR 20 150 100 5.50 LLNL 1,2,5

1058 Musketeer Presidio 1987 APR 22 23:00:00.088 NTS-YF 36.98314 -116.00458 U6d -319.7 1171 UG-S WR 0 20 2.5 4.20 LANL 1,2,5

1059 Musketeer Hardin 1987 APR 30 13:30:00.089 NTS-PM 37.23305 -116.42312 U20av -625 1943 UG-S WR 20 150 100 5.50 V 0.2 Ci LLNL 1,2,5,8

1060 Musketeer Brie 1987 JUN 18 15:20:00.082 NTS-YF 37.19355 -116.03501 U10cc -203 1318 UG-S WR 0 20 LLNL 1,2,5

1061 Musketeer Mission Ghost 1987 JUN 20 16:00:00.18 NTS-RM 37.22000 -116.17780 U12t.09 -321.3 2017 UG-T WE 0 20 V 3 Ci LANL 1,2,5,8

1062 Musketeer Panchuela 1987 JUN 30 16:05:00.10 NTS-YF 36.99860 -116.04310 U3mg -319.13 1179 UG-S WR 0 20 8 4.60 160 V <100 Ci LANL 1,2,5,8,af

1063 Musketeer Tahoka 1987 AUG 13 14:00:00.09 NTS-YF 37.06100 -116.04530 U3mf -638.56 1212 UG-S WR 20 150 370 S 150 5.90 290 LANL 1,2,5,q,af

1064 Musketeer Lockney 1987 SEP 24 15:00:00.055 NTS-PM 37.22799 -116.37471 U19aq -614.17 2045 UG-S WR 20 150 150 5.70 V 4 Ci LANL 1,2,5,8

1065 Touchstone Borate 1987 OCT 23 16:00:00.09 NTS-YF 37.14190 -116.07870 U2ge -542.5 1294 UG-S WR 20 150 38 S 38 5.20 220 V LLNL 1,2,5,8,q,af

1066 Touchstone Waco 1987 DEC 1 16:30:00.09 NTS-YF 36.99641 -116.00447 U3lu -182.9 1176 UG-S WR 0 20 LANL 1,2,5

1067 Touchstone Mission Cyber 1987 DEC 2 16:00:00.084 NTS-RM 37.23465 -116.16338 U12p.02 -270.6 1926 UG-T WE 0 20 2 4.10 LLNL 1,2,5

1068 Touchstone Kernville 1988 FEB 15 18:10:00.089 NTS-PM 37.31444 -116.47148 U20ar -541.6 1899 UG-S WR 20 150 60 5.30 LLNL 1,2,5

1069 Touchstone Abilene 1988 APR 7 17:15:00.078 NTS-YF 37.01316 -116.04433 U3mn -245.06 1187 UG-S WR 0 20 2 4.10 110 LANL 1,2,5,af

1070 Touchstone Schellbourne 1988 MAY 13 15:35:00.108 NTS-YF 37.12442 -116.07210 ? U2gf -463 1268 UG-S WR 0 150 16 S 16 4.80 190 V 22 Ci LLNL 1,2,5,8,q,af

1071 Touchstone Laredo 1988 MAY 21 22:30:00.14 NTS-YF 37.03250 -115.98730 U3mh -351.4 1220 UG-S WR 0 150 3.5 4.30 50 LANL 1,2,5,af

1072 Touchstone Comstock 1988 JUN 2 13:00:00.088 NTS-PM 37.26014 -116.44108 U20ay -620.3 1960 UG-S WR 0 150 80 5.40 V LLNL 1,2,5,8

1073 Touchstone Rhyolite 1988 JUN 22 14:00:00.079 NTS-YF 37.16616 -116.07224 U2ey -207.3 1309 UG-S WR 0 150 LLNL 1,2,5

1074 Touchstone Nightingale 1988 JUN 22 14:00:00.079 NTS-YF 37.16616 -116.07224 U2ey -237.7 1309 UG-S SE 0 150 LLNL 1,2,5

1075 Touchstone Alamo 1988 JUL 7 15:05:30.07 NTS-PM 37.25244 -116.37668 U19au -622.1 1964 UG-S WR 0 150 150 5.70 LANL 1,2,5

1076 Touchstone Kearsarge 1988 AUG 17 17:00:00.095 NTS-PM 37.29716 -116.30654 U19ax -615.7 2102 UG-S WR 100 150 140 5.60 LLNL 1,2,5

1077 Touchstone Harlingen-A S 1988 AUG 23 18:30:00.08 NTS-YF 36.99100 -116.01900 U6g -289.6 1175 UG-S WR 0 20 2 4.10 90 LANL 1,2,5,af

1078 Touchstone Harlingen-B SS 1988 AUG 23 18:30:00.08 NTS-YF 36.98900 -116.01900 U6h 1175 UG-S WR 0 20 LANL 1,2,5

1079 Touchstone Bullfrog 1988 AUG 30 18:00:00.089 NTS-YF 37.08593 -116.06852 U4au -489.2 1236 UG-S WR 0 150 33 S 33 5.10 V 4 Ci LLNL 1,2,5,8,q

1080 Cornerstone Dalhart 1988 OCT 13 14:00:00.08 NTS-YF 37.08900 -116.04926 U4u -639.78 1229 UG-S WR 0 150 370 S 150 5.90 260 LANL 1,2,5,q,af

1081 Cornerstone Monahans-A S 1988 NOV 9 20:15:00.08 NTS-YF 36.99100 -116.02200 U3lk -289.86 1175 UG-S WR 0 20 LANL 1,2,5

1082 Cornerstone Monahans-B SS 1988 NOV 9 20:15:00.08 NTS-YF 36.98900 -116.02200 U6i 1174 UG-S WR 0 20 LANL 1,2,5

1083 Cornerstone Kawich A-White S 1988 DEC 9 15:15:00.08 NTS-YF 37.17500 -116.09300 U8n -384 1357 UG-S SE 0 20 3 80 LLNL 1,2,5,af

1084 Cornerstone Kawich B-Blue SS 1988 DEC 9 15:15:00.08 NTS-YF 37.17500 -116.09300 U8n 1357 UG-S SE 0 20 LLNL 1,2,5

1085 Cornerstone Misty Echo 1988 DEC 10 20:30:00.06 NTS-RM 37.19900 -116.20940 U12n.23 -400 2232 UG-T WE 0 150 25 5.00 ? V 7 Ci LANL 1,2,5,7,8

1086 Cornerstone Texarkana \* 1989 FEB 10 20:06:00.055 NTS-YF 37.07678 -116.00061 U7ca -504.02 1267 UG-S WR 20 150 67 S 67 5.20 240 LANL 1,2,5,q,af

1087 Cornerstone Kawich-Red S 1989 FEB 24 16:15:00.081 NTS-YF 37.12849 -116.12196 U2cu -370 1352 UG-S WR 0 20 5 4.40 V 10 Ci LLNL 1,2,5,8

1088 Cornerstone Kawich-Black SS 1989 FEB 24 16:15:00.08 NTS-YF 37.12849 -116.12196 U2cu -431 1352 UG-S SE 0 20 V LLNL 1,2,5,8

1089 Cornerstone Ingot 1989 MAR 9 14:05:00.086 NTS-YF 37.14283 -116.06694 U2gg -500 1280 UG-S WR 20 150 33 S 33 5.00 LLNL 1,2,5,q

1090 Cornerstone Palisade-1 S 1989 MAY 15 13:10:00.087 NTS-YF 37.10761 -116.12089 U4at -345.22 1338 UG-S WR 0 20 5 4.40 V 2 Ci LLNL 1,2,5,8

1091 Cornerstone Palisade-2 SS 1989 MAY 15 13:10:00.09 NTS-YF 37.10761 -116.12089 U4at -392 1338 UG-S SE 0 20 V LLNL 1,2,5,8

1092 Cornerstone Palisade-3 SS 1989 MAY 15 13:10:00.09 NTS-YF 37.10761 -116.12089 U4at -404 1338 UG-S SE 0 20 8 S 8 V LLNL 1,2,5,8,q

1093 Cornerstone Tulia 1989 MAY 26 18:07:00.021 NTS-YF 37.08587 -116.05513 U4s -397.8 1230 UG-S WR 0 20 0.5 S 0.5 3.70 LANL 1,2,5,q

1094 Cornerstone Contact 1989 JUN 22 21:15:00.83 NTS-PM 37.28288 -116.41231 U20aw -544.1 1980 UG-S WR 20 150 60 5.30 LLNL 1,2,5

1095 Cornerstone Amarillo 1989 JUN 27 15:30:00.02 NTS-PM 37.27546 -116.35356 U19ay -640.1 2019 UG-S WR 20 150 20 4.90 LANL 1,2,5

1096 Cornerstone Disko Elm 1989 SEP 14 15:00:00.098 NTS-RM 37.23589 -116.16290 U12p.03 -260 1917 UG-T WE 0 20 10 4.70 V 0.5 Ci LLNL 1,2,5,8

1097 Aqueduct Hornitos 1989 OCT 31 15:30:00.085 NTS-PM 37.26310 -116.49072 U20bc -562.94 1846 UG-S WR 20 150 150 5.70 LLNL 1,2,5

1098 Aqueduct Muleshoe 1989 NOV 15 20:20:00.119 NTS-YF 37.10652 -116.01338 U7bk -244.45 1311 UG-S WR 0 20 LANL 1,2,5

1099 Aqueduct Whiteface-A S 1989 DEC 20 22:00:00.06 NTS-YF 37.02600 -116.03200 U3lp -196.9 UG-S SE 0 20 LANL 1,2,5

1100 Aqueduct Whiteface-B SS 1989 DEC 20 22:00:00.06 NTS-YF 37.02600 -116.03200 U3lp UG-S SE 0 20 LANL 1,2,5

1101 Aqueduct Metropolis 1990 MAR 10 15:00:00.083 NTS-YF 37.11251 -116.05518 U2gh -469.4 1246 UG-S WR 20 150 44 S 44 5.10 V 6 Ci LLNL 1,2,5,8,q

1102 Aqueduct Bowie 1990 APR 6 17:00:00.047 NTS-YF 37.06767 -115.99213 U3mk -213.4 1271 UG-S WR 0 20 0.1 3.10 LANL 1,2,5,7

1103 Aqueduct Bullion 1990 JUN 13 16:00:00.079 NTS-PM 37.26160 -116.42012 U20bd -673.9 1950 UG-S WR 20 150 150 5.70 LLNL 1,2,5

1104 Aqueduct Austin 1990 JUN 21 18:15:00.00 NTS-YF 36.99284 -116.00449 U6e -350.5 1174 UG-S WR 0 20 2 4.10 LANL 1,2,5

1105 Aqueduct Mineral Quarry S 1990 JUL 25 15:00:00.06 NTS-RM 37.20687 -116.21426 U12n.22 -389.5 2216 UG-T WE 0 20 10 4.70 V 0.5 Ci LANL 1,2,5,8

1106 Aqueduct Randsburg SS 1990 JUL 25 15:00:00.00 NTS-RM 37.20700 -116.21500 U12n.22a 2216 UG-T WR 0 20 LLNL 1,2,5

1107 Aqueduct Sundown-A S 1990 SEP 20 16:15:00.00 NTS-YF 37.03822 -116.05680 U1d -270.4 1206 UG-S SE 0 20 LANL 1,2,5

1108 Aqueduct Sundown-B SS 1990 SEP 20 16:15:00.00 NTS-YF 37.03822 -116.05680 U1d 1206 UG-S SE 0 20 LANL 1,2,5

1109 Aqueduct Ledoux 1990 SEP 27 18:02:46.0 NTS-YF 37.00715 -116.05822 U1a.01 -291 1191 UG-S WR 0 20 LANL 1,2,5

1110 Sculpin Tenabo 1990 OCT 12 17:30:00.08 NTS-PM 37.24786 -116.49421 U20bb -600 1871 UG-S WR 20 150 140 5.60 V LLNL 1,2,5,8

1111 Sculpin Coso-Bronze S 1991 MAR 8 21:02:45.08 NTS-YF 37.10436 -116.07403 U4an -333 1254 UG-S WR 0 20 3.5 4.30 90 LLNL 1,2,5,af

1112 Sculpin Coso-Gray SS 1991 MAR 8 21:02:45.08 NTS-YF 37.10436 -116.07403 U4an 1254 UG-S WR 0 20 8 S 8 LLNL 1,2,5,q

1113 Sculpin Coso-Silver SS 1991 MAR 8 21:02:45.08 NTS-YF 37.10436 -116.07403 U4an 1254 UG-S SE 0 20 LLNL 1,2,5

1114 Sculpin Bexar 1991 APR 4 19:00:00.00 NTS-PM 37.29608 -116.31290 U19ba -629.4 2118 UG-S WR 20 150 140 5.60 V 0.5 Ci LANL 1,2,5,8

1115 Sculpin Montello 1991 APR 16 15:30:00.071 NTS-PM 37.24544 -116.44163 U20bf -641.6 1961 UG-S WR 20 150 80 5.40 LLNL 1,2,5

1116 Sculpin Floydada 1991 AUG 15 16:00:00.00 NTS-YF 37.08733 -116.00179 U7cb -502.9 1280 UG-S WR 0 20 3 S 3 4.40 LANL 1,2,5,q

1117 Sculpin Hoya 1991 SEP 14 19:00:00.005 NTS-PM 37.22564 -116.42813 U20be -658 1951 UG-S WR 20 150 100 5.50 LLNL 1,2,5

1118 Sculpin Distant Zenith 1991 SEP 19 15:30:00.067 NTS-RM 37.23573 -116.16643 U12p.04 -263.8 1921 UG-T WE 0 20 1.5 4.00 V 0.4 Ci LANL 1,2,5,8

1119 Julin Lubbock 1991 OCT 18 19:12:00.00 NTS-YF 37.06343 -116.04529 U3mt -457.2 1213 UG-S WR 20 150 67 S 53 5.20 V 0.1 Ci LANL 1,2,5,8,q

1120 Julin Junction 1992 MAR 26 16:30:00.00 NTS-PM 37.27246 -116.35976 U19bg -622 2013 UG-S WR 20 150 100 5.50 LANL 1,2,5

1121 Julin Diamond Fortune 1992 APR 30 16:30:00.00 NTS-RM 37.23418 -116.15735 U12p.05 -236 1656 UG-T WE 0 20 3 3 V 0.2 Ci LANL 1,2,5,8

1122 Julin Victoria 1992 JUN 19 16:45:00.00 NTS-YF 37.00542 -116.01014 U3kv -244 1179 UG-S WR 0 20 0.08 3.00 LANL 1,2,5,7

1123 Julin Galena-Yellow S 1992 JUN 23 15:00:00.072 NTS-YF 37.12392 -116.03124 U9cv -400 1269 UG-S WR 0 20 LLNL 1,2,5

1124 Julin Galena-Orange SS 1992 JUN 23 15:00:00.07 NTS-YF 37.12392 -116.03124 U9cv 1269 UG-S SE 0 20 LLNL 1,2,5

1125 Julin Galena-Green SS 1992 JUN 23 15:00:00.07 NTS-YF 37.12392 -116.03124 U9cv 1269 UG-S SE 0 20 LLNL 1,2,5

1126 Julin Hunters Trophy 1992 SEP 18 17:00:00.078 NTS-RM 37.20692 -116.20998 U12n.24 -385.3 1827 UG-T WE 0 20 4 S 4 4.40 V 1 Ci LLNL 1,2,5,8,q

1127 Julin Divider 1992 SEP 23 15:04:00.00 NTS-YF 37.02068 -115.98791 U3ml -426 1208 UG-S WR 0 20 5 4.40 V 0.1 Ci LANL 1,2,5,8

## Database of nuclear tests, United Kingdom

compiled by Wm. Robert Johnston  
last modified 11 June 2009

For explanations, codes, and sources see [Introduction](http://www.johnstonsarchive.net/nuclear/tests/UK-ntests0.html).

ID# SERIES SHOT YEAR MON DAY TIME SITE LAT LONG NT HOLE HOB GZALT NT TYPE PUR YD-MN YD-MX YD-EST NT YIELD MAG CRAT VENT DEVIC WARHEAD R N SOURCES

GMT GMT DEG DEG M M KT KT KT KT M

1 Hurricane Hurricane 1952 OCT 3 00:59:24 MB -20.39700 115.55840 -2.7 -12 AW-BG WE 25 25 270 1,2,7,a,j

2 Totem Totem T1 1953 OCT 14 21:30 SAU-EF -28.69850 132.37160 31 300 AS-T WR 10 10 IP Blue Danube? \* 1,2,8,c,j

3 Totem Totem T2 1953 OCT 26 21:30 SAU-EF -28.71230 132.37730 31 310 AS-T WR 8 8 IP Blue Danube? 1,2,8,c,j

4 Mosaic Mosaic G1 1956 MAY 16 03:50 MB -20.38190 115.54790 31 4 AS-T WR? 15 15 1,2,7,j

5 Mosaic Mosaic G2 1956 JUN 19 02:14 MB -20.40610 115.53610 31 8 AS-T 60 98 98 1,2,7,j

6 Buffalo Buffalo R1/One Tree 1956 SEP 27 07:30 SAU-MR -29.86880 131.65940 \* 31 180 AS-T 15 15 IP Red Beard 1,2,4,j

7 Buffalo Buffalo R2/Marcoo 1956 OCT 4 07:00 SAU-MR -29.88180 131.62470 \* 0.2 180 AS WE 1.5 1.5 50 IU Blue Danube 1,2,4,j

8 Buffalo Buffalo R3/Kite 1956 OCT 11 05:57 SAU-MR -29.88800 131.65000 \* 150 180 A-AD WR 3 3 Blue Danube \* 1,2,4,j

9 Buffalo Buffalo R4/Breakaway 1956 OCT 22 14:35 SAU-MR -29.89290 131.60480 \* 31 190 AS-T 10 10 Red Beard \* 1,2,4,j

10 Grapple Grapple 1/Short Granite1957 MAY 15 19:37 LI-MI -4.05000 -154.90000 \* 2400 A-AD WR? 300 125 300 SL? \* 1,2,b

11 Grapple Grapple 2/Orange Herald1957 MAY 31 19:41 LI-MI -4.05000 -154.90000 \* 2300 A-AD WR? 720 175 720 SL? \* 1,2,b

12 Grapple Grapple 3/Purple Granit1957 JUN 19 19:40 LI-MI -4.05000 -154.90000 \* 2300 A-AD WR? 200 88 200 SL? \* 1,2,b

13 Antler Antler Round 1/Tadje 1957 SEP 14 05:05 SAU-MR -29.88980 131.64670 \* 31 180 AS-T WR? 1 0.93 0.93 IP 1,2,4,j

14 Antler Antler Round 2/Biak 1957 SEP 25 00:30 SAU-MR -29.89260 131.61760 \* 31 180 AS-T WR? 6 6 IP 1,2,4,j

15 Antler Antler Round 3/Taranaki1957 OCT 9 06:45 SAU-MR -29.89480 131.59160 \* 300 180 A-B WR? 25 26.6 26.6 PR \* 1,2,4,j

16 Grapple X Grapple X/Round C 1957 NOV 8 17:47 LI-CH 1.67000 -157.25000 ? 2250 A-AD WR 1800 300 1800 TN? \* 1,2

17 Grapple Y Grapple Y 1958 APR 28 19:05 LI-CH 1.67000 -157.25000 ? 2350 A-AD WR 3000 2000 3000 TN \* 1,2

18 Grapple Z Grapple Z/Pennant 2 1958 AUG 22 18:00 LI-CH 1.67000 -157.25000 ? 450 A-B WR 24 34 24 PR 1,2

19 Grapple Z Grapple Z/Flagpole 1 1958 SEP 2 17:24 LI-CH 1.67000 -157.25000 ? 2850 A-AD WR 1000 2750 1000 TN \* 1,2

20 Grapple Z Grapple Z/Halliard 1 1958 SEP 11 17:49 LI-CH 1.67000 -157.25000 ? 2650 A-AD WR 800 2750 800 \* 1,2

21 Grapple Z Grapple Z/Burgee 2 1958 SEP 23 18:00 LI-CH 1.67000 -157.25000 ? 450 A-B WR 25 34 25 1,2

22 Nougat Pampas 1962 MAR 1 19:10:00.09 NTS-YF 37.04128 -116.02867 U3al -363.14 1196 UG-S 9.5 9.5 4.60 198 V 2 kCi 1,2,3,5,f,g,k,n

23 Storax Tendrac 1962 DEC 7 19:00:00.10 NTS-YF 37.05175 -116.02931 U3ba -302.67 1202 UG-S 0 20 10 4.60 155 1,2,3,5,f,g

24 Whetstone Cormorant 1964 JUL 17 17:18:30.03 NTS-YF 37.01761 -116.02956 U3df -271.64 1184 UG-S 0 20 2 V 11 Ci 1,2,3,5,g,n

25 Whetstone Courser 1964 SEP 25 17:02:00.03 NTS-YF 37.07247 -116.01539 U3do -358.99 1237 UG-S 0 0 1,3,5

26 Flintlock Charcoal 1965 SEP 10 17:12:00.03 NTS-YF 37.07797 -116.01672 U7g -455.44 1245 UG-S WR 20 200 29 S 29 5.16 298 Polaris WH? 1,2,3,5,e,f

27 Arbor Fallon 1974 MAY 23 13:38:30.164 NTS-YF 37.12449 -116.07888 U2dv -466.04 1276 UG-S WR 20 200 12 S 20 4.80 190 V 72 Ci Chevaline WH? 1,2,3,5,j,n

28 Anvil Banon 1976 AUG 26 14:30:00.168 NTS-YF 37.12501 -116.08200 U2dz -536.4 1275 UG-S WR 20 150 51 S 51 5.30 230 V 6 Ci Chevaline WH? 1,2,3,5,e,j,n

29 Cresset Fondutta 1978 APR 11 15:30:00.161 NTS-PM 37.29963 -116.32670 U19zs -633.07 2072 UG-S WR 20 150 67 S 67 5.50 Chevaline WH? 1,2,3,5,e

30 Quicksilver Quargel 1978 NOV 18 19:00:00.166 NTS-YF 37.12687 -116.08387 U2fb -542 1275 UG-S 20 150 38 S 38 5.10 190 V 7 Ci 1,2,3,5,e,j,n

31 Quicksilver Nessel 1979 AUG 29 15:08:00.171 NTS-YF 37.12122 -116.06659 U2ep -464 1260 UG-S 20 150 19 S 20 4.80 190 V 1,2,3,5,e,j,n

32 Tinderbox Colwick 1980 APR 26 17:00:00.083 NTS-PM 37.24843 -116.42240 U20ac -633 1946 UG-S 20 150 140 S 140 5.50 V 1,2,3,5,e,n

33 Guardian Dutchess 1980 OCT 24 19:15:00.116 NTS-YF 37.07458 -115.99926 U7bm -426.72 1265 UG-S 0 20 10 4.70 1,2,3,5

34 Guardian Serpa 1980 DEC 17 15:10:00.086 NTS-PM 37.32478 -116.31173 U19ai -572.7 2028 UG-S 20 150 35 S 35 5.10 1,2,3,5,e

35 Praetorian Rousanne 1981 NOV 12 15:00:00.10 NTS-YF 37.10815 -116.04898 U4p -517.2 1243 UG-S 20 150 77 77 5.40 250 1,2,3,5,e,j

36 Praetorian Gibne 1982 APR 25 18:05:00.008 NTS-PM 37.25584 -116.42236 U20ah -570 1937 UG-S 20 150 89 S 89 5.40 V 0.1 Ci 1,2,3,5,e,n

37 Phalanx Armada 1983 APR 22 13:53:00.085 NTS-YF 37.11150 -116.02240 U9cs -265 1296 UG-S 0 20 1.5 4.00 V 1,2,3,5,n

38 Fusileer Mundo 1984 MAY 1 19:05:00.093 NTS-YF 37.10622 -116.02238 U7bo -566 1292 UG-S WR? 20 150 77 S 77 5.40 Trident WH? 1,2,3,5,e

39 Grenadier Egmont 1984 DEC 9 19:40:00.089 NTS-PM 37.27008 -116.49758 U20al -546 1839 UG-S WR? 20 150 103 S 103 5.50 Trident WH? 1,2,3,5,e

40 Charioteer Kinibito 1985 DEC 5 15:00:00.067 NTS-YF 37.05327 -116.04537 U3me -579.42 1208 UG-S WR? 20 150 110 110 5.70 Trident WH? 1,2,3,5,e

41 Charioteer Darwin 1986 JUN 25 20:27:45.092 NTS-PM 37.26459 -116.49931 U20aq -548.95 1849 UG-S WR 20 150 89 S 89 5.60 Trident WH 1,2,3,5,e

42 Musketeer Midland 1987 JUL 16 19:00:00.077 NTS-YF 37.10355 -116.02335 U7by -486.77 1284 UG-S 20 150 14 S 20 4.90 1,2,3,5,e

43 Aqueduct Barnwell 1989 DEC 8 15:00:00.087 NTS-PM 37.23109 -116.40939 U20az -600.8 2031 UG-S WR? 20 150 120 S 120 5.50 V 0.1 Ci Trident WH? 1,2,3,5,e,n

44 Sculpin Houston 1990 NOV 14 19:17:00.071 NTS-PM 37.22742 -116.37124 U19az -594.4 2031 UG-S WR? 20 150 103 S 103 5.40 V Trident WH? 1,2,3,5,e,n

45 Julin Bristol 1991 NOV 26 18:35:00.073 NTS-YF 37.09649 -116.06961 U4av -457 1246 UG-S WR? 0 20 11 S 11 4.60 1,2,3,5,e

## Database of nuclear tests, France

compiled by Wm. Robert Johnston  
last modified 20 February 2008

For explanations, codes, and sources see [Introduction](http://www.johnstonsarchive.net/nuclear/tests/FR-ntests0.html).

ID# SERIES SHOT YEAR MON DAY TIME SITE LAT LONG NT HOLE HOB GZALT NT TYPE PUR YD-MN YD-MX YD-EST NT YIELD MAG CRAT VENT DEVIC WARHEAD R N SOURCES

GMT GMT DEG DEG M M KT KT KT KT M

1 Gerboise Gerboise Bleue 1960 FEB 13 07:04 AL-R 26.31170 -0.05720 105 AS-T WE 60 70 65 IP 1,2,4

2 Gerboise Gerboise Blanche 1960 APR 1 06:17 AL-R 26.16610 -0.10250 0 AS WR 0 20 10 C IP 1,2,4

3 Gerboise Gerboise Rouge 1960 DEC 27 07:30 AL-R 26.35360 -0.12360 50 AS-T WE 0 10 3 ? 3 IP 1,2,4

4 Gerboise Gerboise Verte 1961 APR 25 06:00 AL-R 26.32170 -0.07330 \* 50 AS-T 0 1 0.5 FZ 1,2,4

5 Agate 1961 NOV 7 11:29:59.931 AL-IE 24.05710 5.05210 UG-T WR 0 10 10 IP 1,2,4

6 Beryl 1962 MAY 1 10:00:00.458 AL-IE 24.06300 5.04180 E2 UG-T WR 10 40 20 GT 40 V IP AN-11 1,2,4

7 Emeraude 1963 MAR 18 10:02:00.351 AL-IE 24.04130 5.05210 UG-T WR 10 20 10 10 4.86 IP 1,2,4

8 Amethyste 1963 MAR 30 09:59:00.328 AL-IE 24.04330 5.05700 E3 UG-T WR 0 5 2.5 V IP 1,2,4

9 Rubis 1963 OCT 20 13:00:00.011 AL-IE 24.03550 5.03860 E11? UG-T WR 40 80 52 52 5.60 V IP 1,2,4

10 Opale (Michele) 1964 FEB 14 11:00:00.347 AL-IE 24.05360 5.05230 -353 UG-T WR/P 0 5 3.7 3.7 4.52 IP 1,2,4

11 Topaze 1964 JUN 15 13:40:00.367 AL-IE 24.06660 5.03450 UG-T WR 0 5 2.5 IP 1,2,4

12 Turquoise 1964 NOV 28 10:30:00.035 AL-IE 24.04180 5.04160 UG-T WR 0 10 10 IP 1,2,4

13 Saphir (Monique) 1965 FEB 27 11:30:00.039 AL-IE 24.05870 5.03110 -785 UG-T WR/P 80 150 127 127 5.80 IP 1,2,4

14 Jade 1965 MAY 30 11:00:00.037 AL-IE 24.05500 5.05080 UG-T WR 0 5 2.5 V IP 1,2,4

15 Corindon 1965 OCT 1 10:00:00.043 AL-IE 24.06490 5.03400 UG-T WR 0 5 2.5 IP 1,2,4

16 Tourmaline 1965 DEC 1 10:30:00.088 AL-IE 24.04370 5.04690 UG-T WR 10 20 10 10 5.10 IP 1,2,4

17 Grenat (Georgette) 1966 FEB 16 11:00:00.035 AL-IE 24.04410 5.04120 -403 UG-T WR/P 10 20 13 13 4.94 IP 1,2,4

18 1966 Aldebaran 1966 JUL 2 15:34 PMU-L -21.87000 -139.00000 \* 10 -35 AW-BG WR 28 28 IP AN-52 1,2,3,5

19 1966 Tamoure 1966 JUL 19 15:05 PMU -21.80000 -138.90000 \* 1000 A-AD WR 50 50 IP AN-11 \* 1,2,3,5,b

20 1966 Ganymede X 1966 JUL 21 12:00 PMU-CO -21.79000 -138.91000 \* 12 AS SE 0 0 ND AN-22 2,3,5

21 1966 Betelguese 1966 SEP 11 17:30 PMU-DE -21.83000 -138.88000 ? 470 A-B WR 110 110 IP MR-31 1,2,3,5

22 1966 Rigel 1966 SEP 24 17:00 PFA-FR -22.23000 -138.73000 \* 3 -35 AW-BG WR 125 125 BF 1,2,3,5

23 1966 Sirus 1966 OCT 4 21:00 PMU-DI -21.87000 -139.00000 \* 10 -35 AW-BG WR 205 205 BF 1,2,3,5

24 1967 Altair 1967 JUN 5 19:00 PMU-DE -21.78900 -138.89500 295 A-B WR 15 15 PR? 1,2,3,5

25 1967 Antares 1967 JUN 27 18:30 PMU-DI -21.86500 -139.00000 340 A-B WR 120 120 PR? 1,2,3,5

26 1967 Arcturus 1967 JUL 2 17:30 PMU-DE -21.79500 -138.89200 3 -35 AW-BG WR 22 22 PR? 1,2,3,5

27 1968 Capella 1968 JUL 7 22:00 PMU-DE -21.83000 -138.88000 ? 463 A-B WR 115 115 1,2,3,5

28 1968 Castor 1968 JUL 15 19:00 PMU-DI -21.83000 -138.88000 ? 650 A-B WR 450 450 BF MR-41 1,2,3,5

29 1968 Pollux 1968 AUG 3 21:00 PMU-DE -21.83000 -138.88000 ? 490 A-B WR 150 150 BF MR-41 1,2,3,5

30 1968 Canopus 1968 AUG 24 18:30:00.5 PFA-FR -22.22800 -138.64400 520 A-B WR 2600 1000 2600 4.95 TN 1,2,3,5

31 1968 Procyon 1968 SEP 8 19:00:01 PMU-DI -21.82100 -138.97500 700 A-B WR 1280 1000 1280 4.91 TN 1,2,3,5

32 1970 Andromede 1970 MAY 15 18:00 PMU-DE -21.83000 -138.88000 ? 220 A-B WR 13 13 1,2,3,5

33 1970 Cassiopee 1970 MAY 22 18:30 PMU-DI -21.83000 -138.88000 ? 500 A-B WR 224 224 TN TN-60 1,2,3,5

34 1970 Dragon 1970 MAY 30 17:59:59.9 PFA-FR -22.30900 -138.60600 500 A-B WR 945 945 4.44 TN 1,2,3,5

35 1970 Eridan 1970 JUN 24 18:30 PMU-DE -21.83000 -138.88000 ? 220 A-B WR 12 12 1,2,3,5

36 1970 Licorne 1970 JUL 3 18:30:00.3 PMU-DI -21.93500 -138.91700 500 A-B WR 914 914 4.65 TN TN-60 1,2,3,5

37 1970 Pegase 1970 JUL 27 19:00 PMU-DE -21.83000 -138.88000 ? 220 A-B WR 0.05 0.05 1,2,3,5

38 1970 Orion 1970 AUG 2 19:00 PFA-FR -21.78600 -138.89300 400 A-B WR 72 72 1,2,3,5

39 1970 Toucan 1970 AUG 6 19:00 PMU-DI -21.83000 -138.88000 ? 500 A-B WR 594 594 TN? 1,2,3,5

40 1971 Dione 1971 JUN 5 19:15 PMU-DE -21.83000 -138.88000 ? 275 A-B WR 34 20 34 IP AN-51 1,2,3,5

41 1971 Encelade 1971 JUN 12 19:14:57.3 PMU-DI -23.80000 -137.20000 450 A-B WR 440 440 BF MR-41 1,2,3,5

42 1971 Japet 1971 JUL 4 21:30 PMU-DE -21.83000 -138.88000 ? 230 A-B WR 9 9 TN-60 1,2,3,5

43 1971 Phoebe 1971 AUG 8 18:30 PMU-DE -21.83000 -138.88000 ? 230 A-B WR 4 4 TN-60 1,2,3,5

44 1971 Rhea 1971 AUG 14 19:00:00.8 PMU-DI -21.82300 -138.97600 480 A-B WR 955 955 4.65 TN TN-60 1,2,3,5

45 1972 Umbriel 1972 JUN 25 19:00 PMU-DE -21.83000 -138.88000 ? 230 A-B WR 0.5 0.5 PR TN-60 1,2,3,5

46 1972 Titania 1972 JUN 30 18:30 PMU-DI -21.83000 -138.88000 ? 220 A-B WR 4 4 PR TN-60 1,2,3,5

47 1972 Oberon 1972 JUL 27 18:40 PMU-DI -21.83000 -138.88000 ? 220 A-B WR 6 6 PR TN-60 1,2,3,5

48 1972 Ariel 1972 JUL 31 22:30 PMU-CO -21.79000 -138.91000 \* 10 AS SE 0.001 0.001 FZ TN-60? 3,5,a

49 1973 Euterpe 1973 JUL 21 18:00 PMU-DI -21.83000 -138.88000 ? 220 A-B WR 11 11 TN-60 1,2,3,5

50 1973 Melpomene 1973 JUL 28 23:06 PMU-DE -21.83000 -138.88000 ? 270 A-B WR 0.05 0.05 TN-60? 1,2,3,5

51 1973 Pallas 1973 AUG 18 18:15 PMU-DE -21.83000 -138.88000 ? 270 A-B WR 4 4 TN-60? 1,2,3,5

52 1973 Parthenope 1973 AUG 24 18:00 PMU-DI -21.83000 -138.88000 ? 220 A-B WR 0.2 0.2 TN-60? 1,2,3,5

53 1973 Tamara 1973 AUG 28 18:30 PMU -21.83000 -138.88000 ? 250 A-AD WR 6 6.6 6.6 IP AN-52 \* 1,2,3,5

54 1973 Vesta 1973 SEP 13 15:42 PMU-CO -21.79000 -138.91000 \* 4.1 AS SE 0 0 ND 3,5

55 1974 Capricorne 1974 JUN 16 17:30 PMU-DI -21.83000 -138.88000 ? 220 A-B WR 4 4 TN-70? 1,2,3,5

56 1974 Belier 1974 JUL 1 17:30 PMU-CO -21.79000 -138.91000 \* 5.6 AS SE 0 0 ND 3,5

57 1974 Gemeaux 1974 JUL 7 23:15 PMU-DI -21.83000 -138.88000 ? 312 A-B WR 150 150 TN TN-70? 1,2,3,5

58 1974 Centaure 1974 JUL 17 17:00 PMU-DE -21.83000 -138.88000 ? 270 A-B WR 4 4 TN-80? 1,2,3,5

59 1974 Maquis 1974 JUL 25 17:30 PMU -21.83000 -138.88000 ? 250 A-AD WR 8 8 IP AN-52 \* 1,2,3,5

60 1974 Persee 1974 JUL 28 17:30 PMU-CO -21.79000 -138.91000 \* 5.6 AS SE 0.001 0.001 FZ 3,5

61 1974 Scorpion 1974 AUG 14 00:30 PMU-DI -21.83000 -138.88000 ? 312 A-B WR 96 96 1,2,3,5

62 1974 Taurue 1974 AUG 24 23:45 PMU-DE -21.83000 -138.88000 ? 270 A-B WR 14 14 1,2,3,5

63 1974 Verseau 1974 SEP 14 23:30 PMU-DI -21.87100 -139.01000 433 A-B WR 332 332 TN TN-60? 1,2,3,5

64 1975 Achille 1975 JUN 5 18:15 PFA-R1 -22.28000 -138.74000 \* -623 UG-S WR 0 5 23 S 5 5.33 1,2,3,5,a

65 1975 Hector 1975 NOV 26 00:48 PFA-R1 -22.28000 -138.74000 \* -585 UG-S WR 5 10 17 S 5 5.23 1,2,3,5,a

66 1976 Patrocle 1976 APR 3 17:07 PMU-R -21.83000 -138.88000 ? -600 UG-S WR 0 5 1 1 1,2,3,5,a

67 1976 Menelas 1976 JUL 11 00:30:00.5 PMU-R -21.86300 -138.78600 UG-S WR 5 20 12 S 12 5.09 1,2,3,5,a

68 1976 Calypso 1976 JUL 22 19:00 PMU-R -21.80000 -138.90000 \* -280 MN UG-S SE 0 0 0 ND 2,3,5,a

69 1976 Ulysse A 1976 OCT 30 22:59:59 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 1 1 1,3,5,a

70 1976 Astanax 1976 DEC 5 23:00:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 1 1 1,3,5,a

71 1977 Ulysse B 1977 FEB 19 23:30:00.4 PMU-R -21.84000 -138.84800 UG-S WR 5 20 5 S 5 4.81 1,2,3,5,a

72 1977 Nestor 1977 MAR 19 23:00:59.9 PMU-R34 -21.88700 -138.92000 UG-S WR 20 150 47 S 47 5.59 1,2,3,5,a

73 1977 Oedipe 1977 APR 2 23:30:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 1 1 1,3,5,a

74 1977 Andromaque 1977 JUN 28 18:15 PMU-R -21.80000 -138.90000 \* -280 MN UG-S SE 0 0 0 ND 3,5,a

75 1977 Ajax 1977 JUL 6 22:59:58.52 PMU-R -21.78300 -138.96000 UG-S WR 5 20 28 S 20 5.40 1,2,3,5,a

76 1977 Clytemnestre 1977 JUL 12 23:00 PMU-R -21.80000 -138.90000 \* -280 MN UG-S SE 0 0 0 ND 3,5,a

77 1977 Oreste 1977 NOV 12 01:30:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 16 S 5 5.20 1,2,3,5,a

78 1977 Enee 1977 NOV 24 16:59:59.9 PMU-R34 -21.88400 -138.88600 UG-S WR 20 150 50 S 50 5.61 1,2,3,5,a

79 1977 Laocoon 1977 DEC 17 22:00:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 12 S 5 5.09 1,2,3,5,a

80 1978 Polypheme 1978 FEB 27 23:00:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 1 S 1 4.03 1,2,3,5,a

81 1978 Pylade 1978 MAR 22 17:30:00.5 PMU-R -21.70500 -138.93400 UG-S WR 0 5 12 S 5 5.09 ER 1,2,3,5,a

82 1978 Hecube 1978 MAR 25 17:30:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 1 1 1,3,5,a

83 1978 Xanthois 1978 JUL 1 17:00:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 1 1 1,3,5,a

84 1978 Ares 1978 JUL 19 18:00:00 PMU-R -21.80000 -138.90000 \* UG-S WR 5 20 2 S 5 4.40 1,2,3,5,a

85 1978 Idomenee 1978 JUL 26 23:00:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 4 S 4 4.73 1,2,3,5,a

86 1978 Schedios 1978 NOV 2 18:00:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 3 S 3 4.55 1,2,3,5,a

87 1978 Aphrodite 1978 NOV 14 18:00 PMU-R -21.80000 -138.90000 \* -280 MN UG-S SE 0 0 0 ND 3,5,a

88 1978 Priam 1978 NOV 30 17:31:58.48 PMU-R34 -21.86800 -138.95000 UG-S WR 20 150 64 S 64 5.70 1,2,3,5,a

89 1978 Eteocle 1978 DEC 17 18:04:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 14 S 5 5.15 1,2,3,5,a

90 1978 Eumee 1978 DEC 19 16:57:01.5 PMU-R -21.76800 -138.93400 UG-S WR 5 20 12 S 12 5.09 1,2,3,5,a

91 1979 Penthesilee 1979 MAR 1 17:24:00 PMU-R -21.80000 -138.90000 \* UG-S WR 5 20 8 S 8 4.95 ER? 1,2,3,5,a

92 1979 Philoctete 1979 MAR 9 16:37:00 PMU-R -21.80000 -138.90000 \* UG-S WR 5 20 14 S 14 5.15 ER? 1,2,3,5,a

93 1979 Agapenor 1979 MAR 24 16:28:00.4 PMU-R -21.80600 -138.93300 UG-S WR 5 20 8 S 8 4.95 1,2,3,5,a

94 1979 Polydore 1979 APR 4 18:07:00.5 PMU-R -21.85000 -138.70200 UG-S WR 5 20 6 S 6 4.85 1,2,3,5,a

95 1979 Pyrrhos 1979 JUN 18 23:27:00.7 PMU-R -21.81000 -138.80900 UG-S WR 5 20 4 S 5 4.73 ER? 1,2,3,5,a

96 1979 Egisthe 1979 JUN 29 18:56:00.2 PMU-R34 -21.81800 -138.90300 UG-S WR 20 150 28 S 28 5.40 1,2,3,5,a

97 1979 Tydee 1979 JUL 25 17:57:00 PMU-R34 -21.88000 -138.94000 UG-S WR 20 150 112 S 112 5.90 1,2,3,5,a

98 1979 Palamede 1979 JUL 28 19:56:00.3 PMU-R -21.80900 -138.81200 UG-S WR 0 5 14 S 5 5.15 ER? 1,2,3,5,a

99 1979 Chrysotemis 1979 NOV 19 17:53:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 1 1 1,3,5,a

100 1979 Atree 1979 NOV 22 19:14:13 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 4 S 4 4.73 1,2,3,5,a

101 1980 Thyetse 1980 FEB 23 18:03:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 1 S 2 4.32 1,2,3,5,a

102 1980 Adraste 1980 MAR 3 17:56:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 11 S 5 5.07 1,2,3,5,a

103 1980 Thesee 1980 MAR 23 19:36:58.49 PMU-R34 -21.86100 -138.93900 UG-S WR 20 150 78 S 80 5.77 1,2,3,5,a

104 1980 Boros 1980 APR 1 19:31:00.2 PMU-R -21.84500 -138.75800 UG-S WR 5 20 18 S 18 5.25 1,2,3,5,a

105 1980 Pelpos 1980 APR 4 18:33:00.1 PMU-R -21.92100 -138.79900 UG-S WR 5 20 2 S 5 4.37 1,2,3,5,a

106 1980 Eurypyle 1980 JUN 16 18:26:58.56 PMU-R34 -21.87000 -138.89900 UG-S WR 20 150 26 S 26 5.37 1,2,3,5,a

107 1980 Ilus 1980 JUN 21 17:01:00 PMU-R -21.80000 -138.90000 \* UG-S WR 5 20 9 S 9 5.01 ER 1,2,3,5,a

108 1980 Chryses 1980 JUL 6 17:27:00.5 PMU-R -21.84900 -138.84800 UG-S WR 5 20 5 S 5 4.77 1,2,3,5,a

109 1980 Leda 1980 JUL 9 18:03 PMU-R -21.80000 -138.90000 \* -280 MN UG-S SE 0 0 0 ND 3,5,a

110 1980 Asios 1980 JUL 19 23:46:58.51 PMU-R34 -21.86100 -138.93400 UG-S WR 20 150 78 S 80 5.77 1,2,3,5,a

111 1980 Laerte 1980 NOV 25 17:53:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 2 S 2 4.47 1,2,3,5,a

112 1980 Diomede 1980 DEC 3 17:32:58.48 PMU-R34 -21.87500 -138.93900 UG-S WR 20 150 51 S 51 5.62 TN TN-70 1,2,3,5,a

113 1981 Broteas 1981 FEB 27 23:28:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 8 S 5 4.95 1,2,3,5,a

114 1981 Tyro 1981 MAR 6 17:27:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 2 S 2 4.40 1,2,3,5,a

115 1981 Iphicles 1981 MAR 28 17:23:00.6 PMU-R -21.79000 -138.67800 UG-S WR 5 20 5 S 5 4.77 1,2,3,5,a

116 1981 Clymene 1981 APR 10 17:57:00.5 PMU-L -21.79500 -138.94600 0 UG-S WR 5 20 8 S 8 4.95 1,2,3,5,a

117 1981 Lyncee 1981 JUL 8 22:23:00.3 PMU-R -21.79100 -139.04600 UG-S WR 5 20 22 S 20 5.32 1,2,3,5,a

118 1981 Eryx 1981 JUL 11 17:17:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 8 S 5 4.95 1,2,3,5,a

119 1981 Theras 1981 JUL 18 17:43:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 2 S 2 4.47 1,2,3,5,a

120 1981 Agenor 1981 AUG 3 18:32:58.58 PMU-R34 -21.82400 -138.90300 UG-S WR 20 150 16 S 20 5.21 ER 1,2,3,5,a

121 1981 Leto 1981 NOV 6 17:03:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 1 1 1,2,3,5,a

122 1981 Procles 1981 NOV 11 17:07:00.2 PMU-R -21.85600 -138.95400 UG-S 5 20 3 S 5 4.55 1,2,3,5,a

123 1981 Cilix 1981 DEC 5 16:58:01.1 PMU-R -21.68500 -138.93300 UG-S 5 20 5 S 5 4.81 1,2,3,5,a

124 1981 Cadmos 1981 DEC 8 16:47:00.2 PMU-L -21.79700 -138.92700 0 UG-S 5 20 15 S 15 5.17 1,2,3,5,a

125 1982 Aerope 1982 FEB 20 17:33:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 3 S 3 4.58 1,2,3,5,a

126 1982 Deiphobe 1982 FEB 24 18:15:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 1 1 1,2,3,5,a

127 1982 Rhesos 1982 MAR 20 17:03:00.2 PMU-L -21.84600 -138.86800 0 UG-S WR 5 20 17 S 17 5.23 ER 1,2,3,5,a

128 1982 Evevos 1982 MAR 23 17:07:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 0.5 S 0.5 1,2,3,5,a

129 1982 Aeson 1982 MAR 31 16:30 PMU-R -21.80000 -138.90000 \* -280 MN UG-S SE 0 0 0 ND 3,5,a

130 1982 Laodice 1982 JUN 27 17:00:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 2 S 2 4.37 1,2,3,5,a

131 1982 Antilokos 1982 JUL 1 17:02:00.2 PMU-R34 -21.76900 -138.94600 UG-S WR 20 150 20 S 20 5.28 1,2,3,5,a

132 1982 Pitane 1982 JUL 21 17:13:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 2 S 2 4.47 1,2,3,5,a

133 1982 Laios 1982 JUL 25 18:02:00.0 PMU-L -21.83600 -138.89600 0 UG-S WR 20 80 56 S 56 5.65 1,2,3,5,a

134 1982 Procris 1982 NOV 27 17:02:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 0.5 S 0.5 1,2,3,5,a

135 1983 Eurytos 1983 APR 19 18:53:00.2 PMU-L -21.81900 -138.87200 0 UG-S WR 20 80 40 S 40 5.53 1,2,3,5,a

136 1983 Automedon 1983 APR 25 17:32:59 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 0.25 S 0.25 4.25 1,2,3,5,a

137 1983 Cinyras 1983 MAY 25 17:31:00.1 PMU-L -21.86100 -138.91700 0 UG-S WR 20 80 42 S 42 5.55 1,2,3,5,a

138 1983 Burisis 1983 JUN 18 17:31:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 3 S 3 4.58 1,2,3,5,a

139 1983 Oxylos 1983 JUN 28 17:46:00.2 PMU-L -21.76700 -138.87100 0 UG-S WR 5 20 33 S 20 5.46 1,2,3,5,a

140 1983 Battos 1983 JUL 20 20:30:00 PMU-R -21.80000 -138.90000 \* UG-S WR 5 20 10 S 10 5.04 1,2,3,5,a

141 1983 Carnabon 1983 AUG 4 17:14:00.2 PMU-L -21.83500 -138.82900 0 UG-S WR 20 80 8 S 20 4.95 1,2,3,5,a

142 1983 Linos 1983 DEC 3 16:58:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 4 S 4 4.73 1,2,3,5,a

143 1983 Gyges 1983 DEC 7 17:28:00.3 PMU-L -21.82900 -138.92800 0 UG-S WR 5 20 15 S 15 5.17 1,2,3,5,a

144 1984 Demophon 1984 MAY 8 17:26:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 22 S 5 5.32 1,2,3,5,a

145 1984 Midas 1984 MAY 12 17:31:00.0 PMU-L -21.86300 -138.90100 0 UG-S WR 20 80 56 S 56 5.65 1,2,3,5,a

146 1984 Aristee 1984 JUN 12 17:16:00 PMU-R -21.80000 -138.90000 \* UG-S WR 5 20 2 S 5 4.47 1,2,3,5,a

147 1984 Echemos 1984 JUN 16 17:44:00.0 PMU-L -21.84900 -138.88000 0 UG-S WR 20 80 34 S 34 5.47 1,2,3,5,a

148 1984 Machaon 1984 OCT 27 17:16:00.4 PMU-R -22.06400 -138.47700 UG-S WR 5 20 3 S 5 4.54 1,2,3,5,a

149 1984 Acaste 1984 NOV 2 20:45:00.1 PMU-L -21.85700 -138.92000 0 UG-S WR 20 80 34 S 34 5.47 1,2,3,5,a

150 1984 Miletos 1984 DEC 1 16:51:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 0.5 S 0.5 4.17 1,2,3,5,a

151 1984 Memnon 1984 DEC 6 17:29:00.2 PMU-L -21.83700 -138.89000 0 UG-S WR 20 80 53 S 53 5.63 1,2,3,5,a

152 1985 Cercyon 1985 APR 30 17:29:00.6 PMU-R -21.82900 -138.95200 UG-S WR 5 20 13 S 13 5.12 1,2,3,5,a

153 1985 Nisos 1985 MAY 8 20:28:00.2 PMU-L -21.83100 -138.98100 0 UG-S WR 20 80 90 S 80 5.82 1,2,3,5,a

154 1985 Talaos 1985 JUN 3 17:30:00.6 PMU-R -21.81600 -138.89700 UG-S WR 5 20 11 S 11 5.07 1,2,3,5,a

155 1985 Erginos 1985 JUN 7 17:40:00 PMU-L -21.80000 -138.90000 \* 0 UG-S WR 5 20 5 S 5 4.77 1,2,3,5,a

156 1985 Hero 1985 OCT 24 17:50:00 PMU-R -21.80000 -138.90000 \* -700 UG-S WR 0 5 2 S 2 4.47 TN-81? 1,2,3,5,a

157 1985 Codros 1985 OCT 26 16:35:00.2 PMU-L -21.84900 -138.81500 0 UG-S WR 20 80 18 S 20 5.25 1,2,3,5,a

158 1985 Zetes 1985 NOV 24 16:01:00.7 PMU-R -21.80200 -138.78100 UG-S WR 5 20 5 S 5 4.81 1,2,3,5,a

159 1985 Megaree 1985 NOV 26 17:42:00.1 PMU-L -21.85600 -138.89900 0 UG-S WR 20 80 54 S 54 5.64 Hades 1,2,3,5,a

160 1986 Hyllos 1986 APR 26 17:02:00.7 PMU-R -21.72500 -138.94100 UG-S WR 5 20 5 S 5 4.77 1,2,3,5,a

161 1986 Ceto 1986 MAY 6 16:58:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 5 S 5 4.75 1,2,3,5,a

162 1986 Sthenelos 1986 MAY 27 17:15:00 PMU-R -21.80000 -138.90000 \* UG-S WR 5 20 4 S 5 4.67 1,2,3,5,a

163 1986 Galatee 1986 MAY 30 17:25:00.1 PMU-L -21.86200 -138.94900 0 UG-S WR 20 80 30 S 30 5.43 1,2,3,5,a

164 1986 Hesione 1986 NOV 10 16:58:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 6 S 5 4.87 1,2,3,5,a

165 1986 Naupolis 1986 NOV 12 17:02:00.3 PMU-L -21.84300 -138.92700 0 UG-S WR 5 20 24 S 20 5.34 1,2,3,5,a

166 1986 Peneleos 1986 DEC 6 17:10:00 PMU-R -21.80000 -138.90000 \* UG-S WR 0 5 9 S 5 4.99 1,2,3,5,a

167 1986 Circe 1986 DEC 10 17:15:00.2 PMU-L -21.83300 -138.89200 0 UG-S WR 20 80 32 S 32 5.45 1,2,3,5,a

168 1987 Jocaste 1987 MAY 5 16:58:01.3 PMU-L -21.70500 -138.58100 0 UG-S WR 5 20 5 S 5 4.77 1,2,3,5,a

169 1987 Lycomede 1987 MAY 20 17:05:00.1 PMU-L -21.85000 -138.91300 0 UG-S WR 20 80 30 S 30 5.42 1,2,3,5,a

170 1987 Dirce 1987 JUN 6 18:00:00.7 PMU-L -21.76900 -138.87400 0 UG-S WR 5 20 3 S 5 4.54 1,2,3,5,a

171 1987 Iphpitos 1987 JUN 21 17:55:00.1 PMU-L -21.86500 -138.89100 0 UG-S WR 20 80 15 S 20 5.17 1,2,3,5,a

172 1987 Helenos 1987 OCT 23 16:50:00.3 PMU-L -21.84500 -138.90700 0 UG-S WR 20 80 51 S 51 5.62 1,2,3,5,a

173 1987 Pasiphae 1987 NOV 5 17:30:00.4 PMU-L -21.79100 -138.87400 0 UG-S WR 5 20 18 S 18 5.25 1,2,3,5,a

174 1987 Pelee 1987 NOV 19 16:31:00.2 PMU-L -21.84500 -138.94100 0 UG-S WR 20 80 62 S 62 5.69 1,2,3,5,a

175 1987 Danae 1987 NOV 29 17:59:00 PMU-L -21.80000 -138.90000 \* 0 UG-S WR 5 20 3 S 5 4.65 1,2,3,5,a

176 1988 Nelee 1988 MAY 11 17:00:00.3 PMU-L -21.83300 -138.94500 0 UG-S WR 20 80 20 S 20 5.28 1,2,3,5,a

177 1988 Niobe 1988 MAY 25 17:01:00.1 PMU-L -21.84500 -138.96100 0 UG-S WR 20 80 82 S 80 5.79 1,2,3,5,a

178 1988 Antigone 1988 JUN 16 17:15:00 PMU-L -21.75000 -139.00000 0 UG-S WR 0 5 5 S 5 4.77 1,2,3,5,a

179 1988 Dejanire 1988 JUN 23 17:31:00.3 PMU-L -21.84600 -138.91100 0 UG-S WR 5 20 30 S 20 5.42 1,2,3,5,a

180 1988 Acrisios 1988 OCT 25 17:00:00 PMU-L -21.80000 -138.90000 \* 0 UG-S WR 0 5 2 S 2 4.37 1,2,3,5,a

181 1988 Thrasymedes 1988 NOV 5 16:30:00.4 PMU-L -21.79300 -138.98700 0 UG-S WR 20 80 47 S 47 5.59 1,2,3,5,a

182 1988 Pheres 1988 NOV 23 17:01:00.3 PMU-L -21.83500 -138.95400 0 UG-S WR 20 80 45 S 45 5.57 1,2,3,5,a

183 1988 Cycnos 1988 NOV 30 17:55:00.0 PFA-L2 -22.23300 -138.74000 0 UG-S WR 80 150 103 S 103 5.87 1,2,3,5,a

184 1989 Epeios 1989 MAY 11 16:45:00.5 PMU-L -21.81200 -138.88400 0 UG-S WR 5 20 16 S 16 5.21 1,2,3,5,a

185 1989 Tecmessa 1989 MAY 20 17:59:00 PMU-L -21.80000 -138.90000 \* 0 UG-S WR 0 5 2 S 2 4.47 1,2,3,5,a

186 1989 Nyctee 1989 JUN 3 17:30:00.2 PMU-L -21.84200 -138.92200 0 UG-S WR 20 80 20 S 20 5.28 1,2,3,5,a

187 1989 Cyzicos 1989 JUN 10 17:30:00.1 PFA-L2 -22.21700 -138.72100 0 UG-S WR 80 150 74 S 80 5.75 1,2,3,5,a

188 1989 Hypsipyle 1989 OCT 24 16:30:00.2 PMU-L -21.85200 -138.91200 0 UG-S WR 20 80 24 S 24 5.34 1,2,3,5,a

189 1989 Erigone 1989 OCT 31 16:57:00.3 PMU-L -21.79300 -138.85500 0 UG-S WR 5 20 20 S 20 5.28 1,2,3,5,a

190 1989 Tros 1989 NOV 20 17:29:00.3 PMU-L -21.79300 -138.88400 0 UG-S WR 5 20 28 S 20 5.40 1,2,3,5,a

191 1989 Daunus 1989 NOV 25 18:00 PMU-R -21.80000 -138.90000 \* -280 MN UG-S SE 0 0 0 ND 3,5,a

192 1989 Lycos 1989 NOV 27 17:00:00.0 PFA-L2 -22.25100 -138.72200 0 UG-S WR 80 150 87 S 87 5.81 1,2,3,5,a

193 1990 Telephe 1990 JUN 2 17:29:58.5 PMU-L -21.87700 -138.91800 0 UG-S WR 5 20 30 S 20 5.42 1,2,3,5,a

194 1990 Megapentes 1990 JUN 7 17:30:00 PMU-L -21.80000 -138.90000 \* 0 UG-S WR 5 20 4 S 5 4.65 1,2,3,5,a

195 1990 Cypselos 1990 JUN 26 17:59:58.2 PFA-L2 -22.21500 -138.84100 0 UG-S WR 80 150 100 S 100 5.86 1,2,3,5,a

196 1990 Anticlee 1990 JUL 4 17:59:58.6 PMU-L -21.85000 -139.04200 0 UG-S WR 5 20 18 S 18 5.25 1,2,3,5,a

197 1990 Hyrtacos 1990 NOV 14 18:11:58.3 PFA-L2 -22.25800 -138.80500 0 UG-S WR 80 150 118 S 118 5.92 1,2,3,5,a

198 1990 Thoas 1990 NOV 21 16:59:58.1 PMU-L -21.93600 -138.96700 0 UG-S WR 20 80 36 S 36 5.49 1,2,3,5,a

199 1991 Melanippe 1991 MAY 7 17:00:00 PMU-L -21.80000 -138.90000 \* 0 UG-S WR 0 5 1 S 1 4.25 1,2,3,5,a

200 1991 Alcinos 1991 MAY 18 17:14:58.5 PMU-L -21.83200 -139.01400 0 UG-S WR 20 80 16 S 20 5.21 1,2,3,5,a

201 1991 Periclymentos 1991 MAY 29 18:59:58.2 PFA-L2 -22.25600 -138.79400 0 UG-S WR 80 150 106 S 106 5.88 1,2,3,5,a

202 1991 Pitthee 1991 JUN 14 17:59:57.8 PMU-L -21.94400 -138.98800 0 UG-S WR 20 80 28 S 28 5.40 1,2,3,5,a

203 1991 Coronis 1991 JUL 5 18:00:00 PMU-L -21.80000 -138.90000 \* 0 UG-S WR 0 5 1 S 0.3 3.80 1,2,3,5,a

204 1991 Lycurgue 1991 JUL 15 18:09:58.3 PMU-L -21.87700 -138.96300 0 UG-S WR 20 80 34 S 34 5.47 1,2,3,5,a

205 1995 Thetis 1995 SEP 5 21:29:58.4 PMU-L -21.85000 -138.84000 0 UG-S WR 5 20 8 S 8 4.93 1,3,5,a

206 1995 Ploutos 1995 OCT 1 23:29:58 PFA-L2 -22.25000 -138.74000 0 UG-S WR 80 150 97 S 97 5.85 TN-75 1,3,5,a

207 1995 Aepytos 1995 OCT 27 21:59:58.2 PMU-L -21.89000 -138.98000 0 UG-S WR 20 80 39 S 39 5.52 TN-75 1,3,5,a

208 1995 Phegee 1995 NOV 21 21:29:58.1 PMU-L -21.88000 -139.03000 0 UG-S WR 20 80 17 S 20 5.22 1,3,5,a

209 1995 Themisto 1995 DEC 27 21:29:58 PMU-L -21.88000 -138.97000 0 UG-S WR 20 80 21 S 21 5.29 1,3,5,a

210 1996 Xouthos 1996 JAN 27 21:29:57.8 PFA-L2 -22.24000 -138.82000 0 UG-S WR 20 150 46 S 46 5.58 TN-75 1,3,5,a

## Database of nuclear tests, China-PRC

compiled by Wm. Robert Johnston  
last modified 15 June 2005

For explanations, codes, and sources see [Introduction](http://www.johnstonsarchive.net/nuclear/tests/PRC-ntests0.html).

ID# SERIES SHOT YEAR MON DAY TIME SITE LAT LONG NT HOLE HOB GZALT NT TYPE PUR YD-MN YD-MX YD-EST NT YIELD MAG CRAT VENT DEVIC WARHEAD R N SOURCES

GMT GMT DEG DEG M M KT KT KT KT M

1 596 1964 OCT 16 07:00 LN 42.35000 88.30000 ? 102 AS-T 20 22 22 22 IU NGB C 1,2,3

2 1965 MAY 14 02:00 LN 41.50000 88.50000 500 A-AD 20 40 35 35 IU NGB C \* 1,2,3

3 1966 MAY 9 08:00 LN 41.50000 88.50000 A-AD 200 300 250 250 BF C \* 1,2,3

4 1966 OCT 27 01:10 LN 41.50000 88.50000 569 A-R 12 30 12 12 IU DF-2 wh C \* 1,2,3

5 1966 DEC 28 04:00 LN 41.50000 88.50000 102 AS-T 300 500 122 300 BF C 1,2,3

6 1967 JUN 17 00:19:08.20 LN-D 40.74400 89.77500 2960 A-AD 3000 3300 3300 3300 4.70 TN NGB/DF-3 wh C \* 1,2,3,4

7 1967 DEC 24 04:00 LN 41.50000 88.50000 A-AD 15 25 20 BF \* 1,2,3

8 1968 DEC 27 07:30 LN 41.50000 88.50000 A-AD 3000 3000 TN NGB/DF-3 wh \* 1,2,3

9 1969 SEP 22 16:14:59.21 LN-B 41.37600 88.31800 UG-T 20 25 19.2 19.2 5.20 C 1,2,3,4

10 1969 SEP 29 08:40:12.36 LN-D 40.72200 89.51500 A-AD 3000 3000 3000 4.37 TN NGB/DF-3 wh C \* 1,2,3,4

11 1970 OCT 14 07:29:56.91 LN-D 40.52000 89.77900 A-AD 3000 3400 3400 3400 4.60 TN NGB/DF-3 wh \* 1,2,3,4

12 1971 NOV 18 06:00 LN 41.50000 88.50000 AS-T 15 20 20 PR 1,2,3,b

13 1972 JAN 7 07:00 LN 41.50000 88.50000 A-AD 8 20 8 IC tactical NW? \* 1,2,3

14 1972 MAR 18 06:00 LN 41.50000 88.50000 A-AD 100 200 170 PR? \* 1,2,3

15 1973 JUN 27 03:59:46.29 LN-D 40.79850 89.80910 T A-AD 2000 3000 3000 3000 4.80 TN NGB/DF-3 wh \* 1,2,3,4

16 1974 JUN 17 05:59:52.72 LN-D 40.51800 89.61900 A 200 1000 1000 1000 4.50 TN BM wh? 1,2,3,4

17 1975 OCT 27 00:59:58.23 LN-B 41.37500 88.32600 UG-T 0 10 2.5 2.5 5.00 1,2,3,4

18 1976 JAN 23 06:00 LN 41.50000 88.50000 A 0 20 1,2,3

19 1976 SEP 26 06:00 LN 41.50000 88.50000 A 200 200 FZ 1,2,3

20 1976 OCT 17 04:59:58.80 LN-A 41.70800 88.37000 UG-T 10 20 2.6 2.6 4.90 1,2,3,4

21 1976 NOV 17 06:00:12.70 LN-D 40.69600 89.62700 A-AD 4000 4000 4000 4.70 TN DF-5 wh? \* 1,2,3,4

22 1977 SEP 17 07:00 LN 41.50000 88.50000 A 0 20 1,2,3

23 1978 MAR 15 05:00 LN 41.50000 88.50000 A 6 20 11 C 1,2,3

24 1978 OCT 14 00:59:58.01 LN-C 41.52300 88.72200 UG-S 0 20 3.4 3.4 4.90 1,2,3,4

25 1978 DEC 14 LN 41.50000 88.50000 A 0 20 1,2,3

26 X 1979 FEB 2 LN 41.50000 88.50000 UG 0 20 1 e

27 1979 SEP 13 LN 41.50000 88.50000 UG 0 20 1,2,3,e

28 1980 OCT 16 04:30:29.67 LN-D 40.71900 89.65100 A 200 1000 1000 1000 4.44 BM wh? 1,2,3,4

29 1982 OCT 5 LN 41.50000 88.50000 UG 3 15 7 4.50 1,2,3

30 1983 MAY 4 04:59:57.82 LN-A 41.67900 88.36800 UG-T 1 1 1 4.50 1,2,3,4

31 1983 OCT 6 09:59:58.05 LN-C 41.53800 88.71400 UG-S 20 100 14.9 5.47 1,2,3,4

32 1984 OCT 3 05:59:57.99 LN-C 41.57130 88.72160 T UG-S 15 70 9.1 5.20 1,2,3,4

33 1984 DEC 19 05:59:58.34 LN-A 41.73700 88.42500 UG-T 5 50 1.3 15 4.70 1,2,3,4

34 1987 JUN 5 04:59:58.26 LN-C 41.51800 88.71300 UG-S 250 400 250 250 6.30 JL-1 wh? 1,2,3,4,c

35 1988 SEP 29 06:59:57.97 LN-A 41.76800 88.38000 UG-T 1 20 2.5 3 4.70 ER? tactical ERW? 1,2,3,4

36 1990 MAY 26 07:59:57.94 LN-C 41.56900 88.70100 UG-S 15 65 11.5 5.50 1,2,3,4

37 1990 AUG 16 04:59:57.70 LN-C 41.51400 88.73900 UG-S 50 200 189 189 6.20 JL-1 wh? 1,2,3,4

38 1992 MAY 21 04:59:57.45 LN-C 41.51300 88.77400 UG-S 660 1000 650 660 6.50 BM wh? 1,2,3,4

39 1992 SEP 25 07:59:58.47 LN-A 41.71600 88.33600 UG-T 5 20 8 8 5.00 PR? 1,2,3,4,c

40 X 1992 NOV 2 LN 41.50000 88.50000 UG 0.001 20 1 e

41 1993 OCT 5 01:59:56.6 LN-C 41.66700 88.69500 UG-S 40 80 80 80 5.90 DF-31 wh? 1,2,3,a

42 1994 JUN 10 06:25:57.9 LN-C 41.53000 88.71000 UG-S? 40 50 90 90 5.80 DF-31 wh? 1,2,b,c

43 1994 OCT 7 03:25:58.1 LN-C 41.66000 88.75000 UG-S 40 50 90 90 6.00 DF-31 wh? 1,2,a,c

44 1995 MAY 15 04:05:57.8 LN-C 41.60000 88.82000 UG-S 40 150 95 95 6.10 DF-31 wh? 1,2,a

45 1995 AUG 17 00:59:57.7 LN-C 41.56000 88.80000 UG-S? 60 80 90 90 6.00 DF-31 wh? 1,2,c

46 S 1996 JUN 8 02:55:57.9 LN-C 41.66000 88.69000 UG-S? 20 80 50 50 5.90 1,2,b,c

47 SS 1996 JUN 8 02:55:57.9 LN-C 41.66000 88.69000 UG-S? 1,2,b

48 1996 JUL 29 01:48:57.8 LN-A 41.82000 88.42000 UG-T? 1 5 3 3 4.90 1.2.c

## Database of nuclear tests, India, Pakistan, North Korea, and unknown

compiled by Wm. Robert Johnston  
last modified 29 May 2009

*Preliminary version*

For explanations, codes, and sources see [Introduction](http://www.johnstonsarchive.net/nuclear/tests/OTH-ntests0.html).

ID# SERIES SHOT YEAR MON DAY TIME SITE LAT LONG NT HOLE HOB GZALT NT TYPE PUR YD-MN YD-MX YD-EST NT YIELD MAG CRAT VENT DEVIC WARHEAD R N SOURCES

GMT GMT DEG DEG M M KT KT KT KT M

\*\*\* INDIA \*\*\*

1001 Pokhran I Pokhran I 1974 MAY 18 02:34:55.0 POK 27.09500 71.75200 -107 UG-S 12 15 9 12 5.00 95 IP 1,2,3,7

1002 Shakti-98 Shakti I S 1998 MAY 11 10:13:41.8 POK 27.07160 71.76120 White Ho -200 MN UG-S 40 46 30 T 43 5.20 80 TN? \* 1,2,3,7

1003 Shakti-98 Shakti II SS 1998 MAY 11 10:13:41.8 POK 27.07200 71.76100 Taj Maha -150 MN UG-S 12 12 12 IP \* 1,2,3,7

1004 Shakti-98 Shakti III SS 1998 MAY 11 10:13:41.8 POK 27.07200 71.76100 Kumbhkaran UG 0.2 0.2 IP \* 1,2,3,7

1005 Shakti-98 Shakti IV S 1998 MAY 13 06:51 POK 27.10000 71.80000 NT1 -20 ? UG 0.5 0.1 MX 0.5 4 1,2,3,7

1006 Shakti-98 Shakti V SS 1998 MAY 13 06:51 POK 27.10000 71.80000 NT2 UG 0.3 0.1 MX 0.3 1,2,3,7

\*\*\* PAKISTAN \*\*\*

2001 Chagai Chagai-I S 1998 MAY 28 10:16:15.2 CHA 28.79190 64.94750 UG-T 30 35 10 T 32 4.80C BF? 1,4,7

2002 Chagai Chagai-I SS 1998 MAY 28 10:16:15.2 CHA 28.79190 64.94750 UG-T 1 1,4,7

2003 Chagai Chagai-I ? 1998 MAY 28 10:16:15.2 CHA 28.79190 64.94750 UG-T 1 1,4,7

2004 Chagai Chagai-I ? 1998 MAY 28 10:16:15.2 CHA 28.79190 64.94750 UG-T 1 1,4,7

2005 Chagai Chagai-I ? 1998 MAY 28 10:16:15.2 CHA 28.79190 64.94750 UG-T 1 1,4,7

2006 Chagai Chagai-II S 1998 MAY 30 06:54:54.9 CHA 28.49000 63.73000 -36 UG-S 15 18 5 T 4.80 1,4,5,6,7

2007 Chagai Chagai-II ? 1998 MAY 30 06:54:54.9 CHA 28.49000 63.73000 UG-S 1,4,5,6,7

\*\*\* UNKNOWN (REPUBLIC OF SOUTH AFRICA?) \*\*\*

3001 1979 SEP 22 00:53 -SATL -46.36000 37.57000 A 3 3 1,8

\*\*\* NORTH KOREA \*\*\*

4001 2006 OCT 9 01:35:27 41.29 129.09 UG 0.2 4 0.5 0.5 4.30 IP 9

4002 2009 MAY 25 00:54:43 41.306 129.029 UG 4 4 4.70 IP? 10,11